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ABSTRACT

This monograph examines vocational training (VT) in the Federal Republic of Germany. Section 1 presents background information/framework data on the following: Germany's political and administrative structures, population and demographic trends, economy and employment, and education system. In section 2, the historical development of VT in Germany is traced from the Middle Ages through German unification in 1990. Discussed in sections 3-7 are the following: initial VT (definition, Germany's dual system, VT in schools, special forms of initial training, and programs conducted by labor authorities); continuing VT (continuing VT's basic data and structures, target groups/participants, providers, personnel, and legal structural conditions); organization and responsibilities (organization and competence structure in the dual system, collaboration between employers and employees, and competent authorities of continuing VT); financing of VT in enterprises, schools, and external (non-plant) training centers, financing of the promotion of VT through the Federal Labor Office, and financing authorities dealing with VT; and developments and future prospects (problems/trends/developments in the new Lander, VT, and continuing VT and international dimensions in VT). Thirty-five tables/figures are included. Appended are the following: 32-item bibliography; bilingual list of selected institutions, legislation, and key terms; and lists of important addresses, key terms, and related publications (in languages other than German). (MN)

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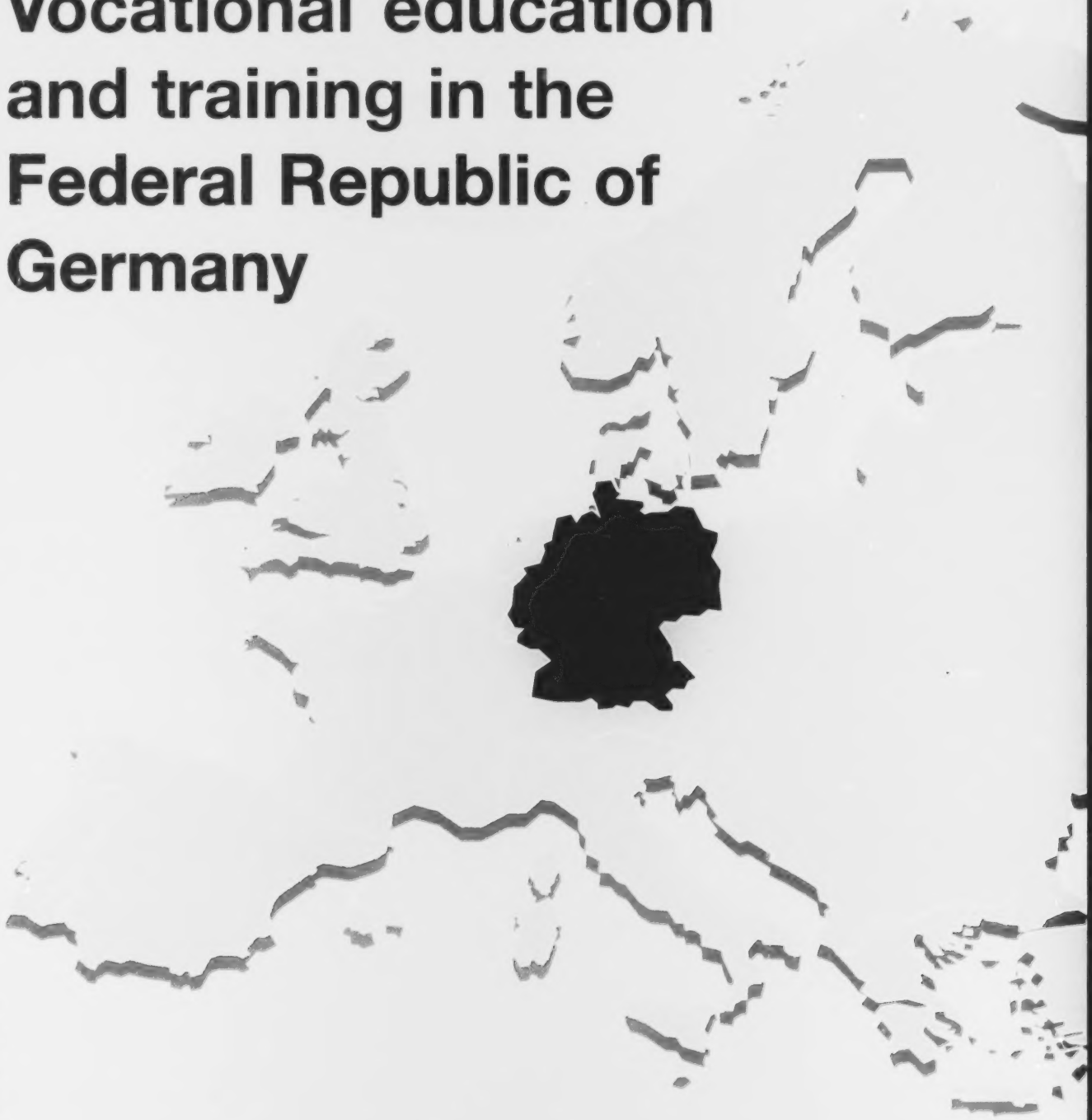

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Vocational education and training in the Federal Republic of Germany

This monograph has been prepared by:

Joachim Münch
University of Kaiserslautern
1992

on behalf of
CEDEFOP – European Centre for the Development of Vocational Training

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under the responsibility of: Corrado Politi – Deputy Director – CEDEFOP

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CEDEFOP INTRODUCTION

IS THERE A SYSTEM?

Is there such a thing as a vocational training system? Strictly speaking, the answer is 'no', in that a system assumes a clear set of objectives and a logical and coherent framework for policy making and execution to achieve them. In reality, vocational training, sandwiched between the education system and the demands of the labour market, caught between the different and varying social, economic, and political priorities of political parties and the social partners, and in the conflicts between different ministries and public powers, located at national, regional, and local level, does not in any of the Community Member States demonstrate the characteristics of a system.

Nevertheless, this volume and the 11 similar volumes on the other Member States constitute a third generation of CEDEFOP monographs on the training systems in the Member States. In preparing it, much has been learnt from the procedures used for, and the reaction to, the earlier monographs and the Guide to the vocational training systems, published in 1983.

CONTENT OF THE REPORTS

The present monographs have been prepared by one organization or individual in each of the Member States, following a detailed specification by CEDEFOP of the contents required. These specifications were discussed and agreed at a meeting in Berlin in May 1991.

The basic structure was designed to incorporate

(a) a presentation of the administrative, demographic, and economic background in which the training system exists;
(b) a brief historical review of the development of the training systems;
(c) a presentation of the arrangements for initial training;
(d) a presentation of the arrangements for continuing training;
(e) an indication of where responsibilities for administering the system are located, including the influence of the social partners;
(f) information on financing the system;
(g) an indication of present trends and developments, where authors were asked, in particular, to indicate how far the system has been, or would be, influenced by Community considerations such as the creation of the Single European Market, mutual recognition of qualifications, the intervention of the Structural Funds, and the Community's education and training programmes.

THE PROCESS OF PREPARATION

Authors were asked to send a copy of their draft report for comment to the members of CEDEFOP's Management Board in their country, and organizations with a major role in the training system. They were requested to incorporate the views expressed to the maximum extent possible. Whereas in general authors were asked to be descriptive and analytical, they were encouraged in the last section (point g above) to express their own views.

Initial draft monographs on each of the Member States were delivered to CEDEFOP in the period between September 1991 and March 1992. As experience had led us to expect, the documents received varied considerably in their approach, content, and presentation. Between January and October 1992 CEDEFOP had a series of intensive meetings with each of the authors, in order to ensure that certain elements were added to the reports and that they respected specific rules with relation to presentation. A novel and very beneficial feature of these meetings was participation in many cases by the translators responsible for translating the volume concerned.

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Following these meetings the authors revised their report on the basis of what was said during the meeting, took account of comments received, and included references to recent developments in their country.

USE OF DIAGRAMS

It had been hoped that a large number of diagrams could be developed which would be common to all the monographs, and could then be used to simplify comparisons between the Member States by the reader. These could later become the basis of additional publications, such as a guide to the training systems or particular aspects of them. However, we have found that while it is relatively easy to obtain and present statistical information on the population, the employment market, and the economy, it remains difficult not only to obtain hard and comparable data on many aspects of the education and training systems of all 12 Member States, but also to present this information in a useful diagrammatic form.

WHO ARE THE USERS?

A question which came up repeatedly in the preparation of the monographs was: what is our primary user group? Our belief is that these monographs will be useful to a wide range of people active in vocational training, including policy makers, practitioners, and researchers, but also to those seeking training in another country, and needing to know the framework in which it is provided. They are therefore, in particular, geared towards the needs of those who participate, or wish to participate in any of the Community programmes involving partnerships, visits, etc. Hence the emphasis on having monographs which are not more than 100 pages in length, and which do not require reference to other documents.

LINKS WITH OTHER COMMUNITY ACTIVITIES

CEDEFOP has been anxious that this work should be seen in the context of other Community activities with relation to information on the education and training systems. CEDEFOP has been glad to participate in the joint publication with Eurydice of Structures of the Education and Initial Training Systems in the Member States of the European Community, available in English, French and German. The European Unit of Eurydice and CEDEFOP have also tried to ensure that the authors of the monographs on the training systems, and the Eurydice units providing information for the national dossiers on the education systems, should be in contact with each other. The European Unit of Eurydice and CEDEFOP similarly are continuing their efforts to ensure that the products of this work should be available to a wide audience, and with this in mind are investigating possibilities of holding the information on a common automated system.

In a more general way, as indicated above, CEDEFOP considers these monographs should be useful in supporting other activities of the Community in the field of training, and through this the implementation of the new provisions, contained in Articles 126 and 127 of the Maastricht Treaty.

The publication of these monographs does not mark the end of this activity. Arrangements will be made for their up-dating and their re-publication as appropriate and as resources permit. CEDEFOP would be extremely pleased to have comments on their usefulness and proposals on how they could be improved, from anybody who has occasion to use them.

Corrado Politi
Deputy Director

J. Michael Adams

F. Alan Clarke

Berlin, November 1992

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AUTHOR'S FOREWORD

A description of the vocational training system of the Federal Republic of Germany within 100 or so pages; this was the task set by the European Centre for the Development of Vocational Training. It was not an easy assignment since the subject is so complex. On the one hand, the report was to include as many essential facts and aspects as possible but on the other hand, it was to be sufficiently detailed as to extend beyond bold and simple statements.

The unification of the two German states on 3 October 1990 made this project even more complicated. The 'new' federal *Länder* are lodged in a profound economic and societal restructuring process which is having a decided impact on vocational training as well. Consequently, the state of information on this part of Germany is still quite unreliable. This is true despite the fact that the 1991 year-book of statistics (*Statistisches Jahrbuch*) included all of Germany for the first time in 50 years. For this reason, structures and data in the report refer primarily to the 'old' federal *Länder* (i.e. those *Länder* which made up the Federal Republic of Germany before unification). This is justifiable, however, because in August 1990, in other words before unification, the People's Chamber of the former German Democratic Republic enacted the Vocational Training Act and Craft Codes of the Federal Republic of Germany. This set the course for structural adaptation, which is still under way, and thus for harmonization of the vocational training system throughout all of Germany.

Since the Vocational Training Act came into force in 1969, apprentices have been officially known as 'trainees' although the term 'apprentice' is commonly used throughout the world. What is more, in everyday language in the Federal Republic of Germany, people still tend to refer to 'apprentices' and 'apprenticeship training', etc. For these and linguistic reasons, we will use these terms in this report.

I would like to thank the Federal Ministry of Education and Science, the Secretary's office of the Standing Conference of Land Ministers of Education and Cultural Affairs and the representatives of the employers' associations and the trade unions whose constructive criticism made an important contribution to this study.

I would like to thank Monika Hack and Judith Wüst for their technical assistance.

Joachim Münch
April 1992

BACKGROUND INFORMATION AND FRAMEWORK DATA

Federal Republic of Germany

Source: Federal Statistical Office, Statistisches Jahrbuch 1991, p.11

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1.1. Political and administrative structures

Pursuant to its Constitution, the Basic Law of 30 May 1949, the Federal Republic of Germany is a federal, democratic, parliamentary and social State founded on the rule of law. Since the unification of the two German states on 3 October 1990, it has been a Federal State comprising 16 *Länder*. These are listed here along with their capital, beginning with the 'old' Länder and followed by the 'new'.

Old *Länder*: *Baden-Württemberg (Stuttgart), Bavaria (Munich), Bremen (city-state), Hamburg (city-state), Hesse (Wiesbaden), Lower Saxony (Hanover), North Rhine-Westphalia (Düsseldorf), Rhineland-Palatinate (Mainz), the Saarland (Saarbrücken), Schleswig-Holstein (Kiel), Berlin* (city-state)

New *Länder: Brandenburg (Potsdam), Mecklenburg-West Pomerania (Schwerin), Saxony (Dresden), Saxony-Anhalt (Magdeburg), Thuringia (Erfurt).*

On 20 June 1991, the *Bundestag* passed a resolution henceforth making Berlin the nominal capital of the Federal Republic of Germany. In reality, Bonn will remain the capital for some time to come; for organizational and financial reasons, it will take years before the Federal President, the Federal Government, the Federal Ministries, the *Bundestag* (representation of the people) and the Bundesrat (representation of the *Länder*) move to Berlin. Moreover, by reason of a subsequent resolution of the *Bundestag*, a number of ministries, including the Federal Ministry of Education and Science, which together with other specialized ministries is responsible for vocational training in enterprises, will most likely stay in Bonn.

The legislative bodies are the *Bundestag* and the *Bundesrat*. In addition, each of the 16 *Länder* has its own parliament (*Landtag*) as a legislative body. Just as the Federal Government is elected by the *Bundestag*, so too are the *Länder* governments elected by their *Landtag*.

The tasks of government are divided among the Federal Government and the *Länder*. The *Länder* see to their implementation provided the Basic Law does not lay down or allow any other regulation (Article 30). A very important exception is the exclusive responsibility of the *Länder* for state schooling and education, and thus for vocational training schools. Consequently, all school laws are *Länder* laws in accordance with the 'cultural and educational autonomy' of the *Länder* as laid down in the Basic Law. Responsibility for vocational training in enterprises, on the other hand, rests exclusively with the Federal Government. An important institution for harmonizing the education policies of the 16 *Länder* is the Standing Conference of Land Ministers of Education and Cultural Affairs (KMK), whose seat is in Bonn. With its resolutions and framework agreements, the Conference makes sure that a very high degree of coordination and harmonization is guaranteed, despite the autonomy of the *Länder* in school and educational issues in principle and the central competence of the Federal Government for vocational training in enterprises.

1.2. Population and demographic trends

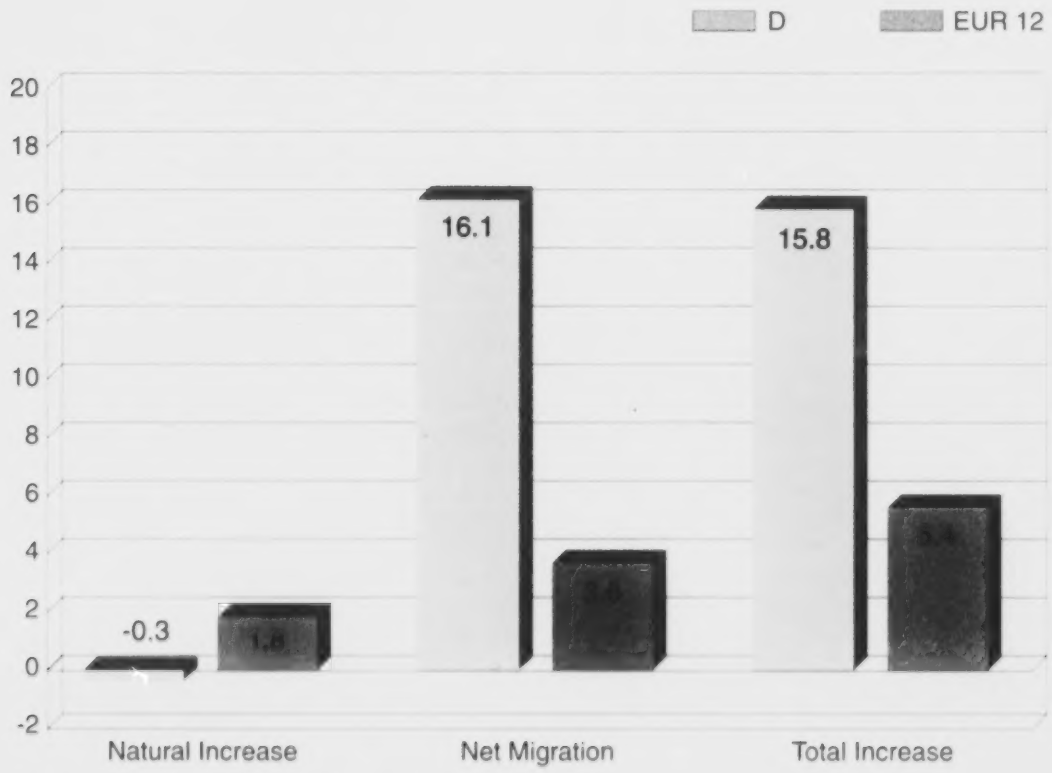
General trends

1.2.1.
The territory of the Federal Republic of Germany covers 356 957 km^2. The population including foreigners numbered 79 112 000 in 1989. This corresponded to a population density of 222 people per km^2. The *Länder* vary considerably in area and number of inhabitants; the most densely populated *Land* is North Rhine-Westphalia (16 954 000) and the least densely populated is Bremen (667 000).

The number of female inhabitants (41 003 000) greatly exceeds the number of males (38 109 000).

The following figures show the demographic development in the Federal Republic of Germany (old federal *Länder*).

Change in the population in 1989 (per 1 000 inhabitants)



Source: Eurostat: A Social Portrait of Europe, 1991

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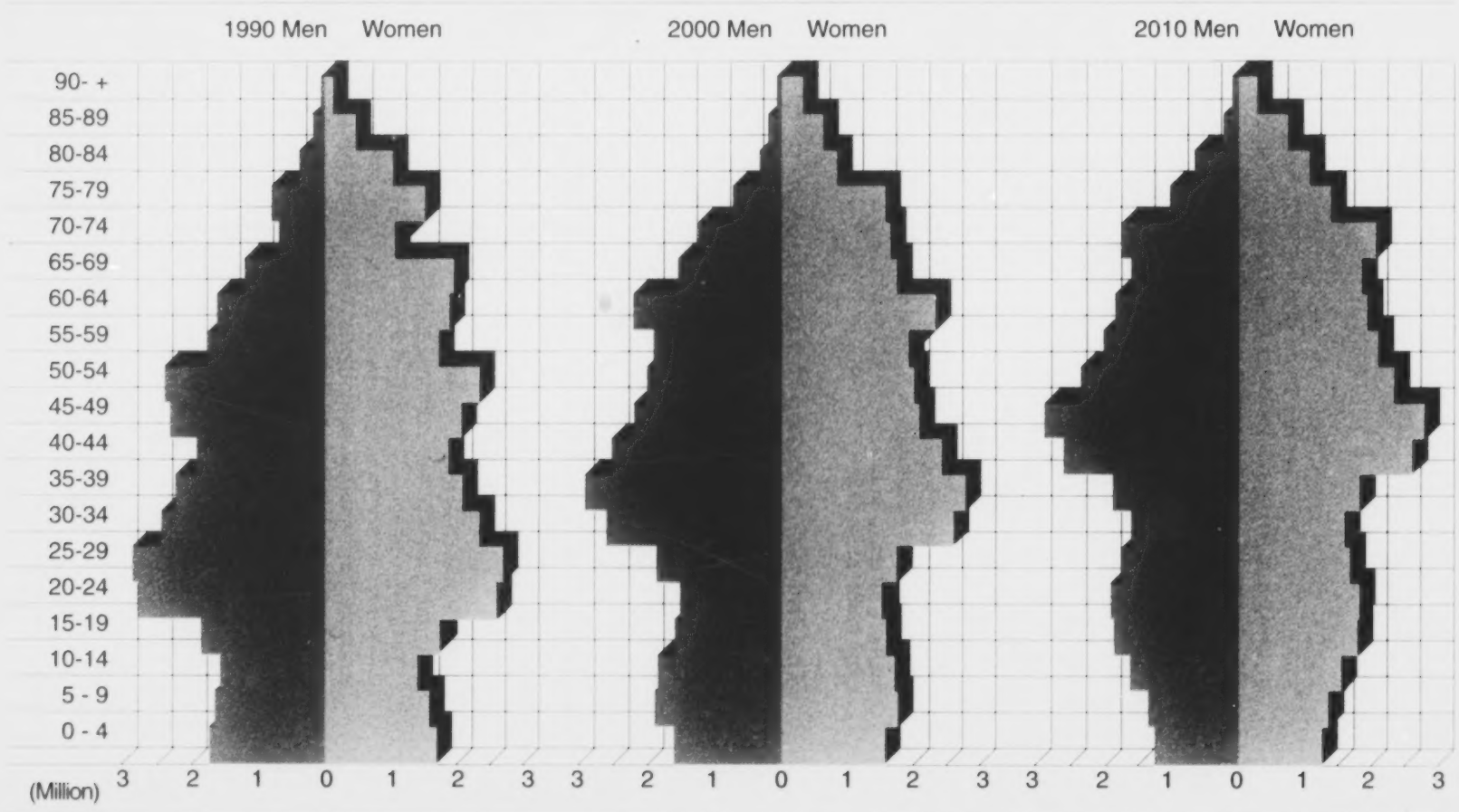
Age structure

Estimate as at 1 January 1990 — Forecast 2000 and 2010



Source: Eurostat – Demographic Statistics 1992

11

Foreign population

1.2.2.
In 1987 there was a decline in the number of foreigners living in Germany (4 632 000 in 1986 versus 4 241 000 in 1987). Their number soon increased again so that in 1989, there were 4 846 000 foreigners in the old federal *Länder*, which comprised 7.7% of the population. In the former German Democratic Republic, foreigners made up only 1.2% of the population. In the entire Federal Republic, the number of foreigners in 1989 totalled 5 037 000, which comprised 6.4% of the population.

Thus foreigners represent a large and important source of labour in the Federal Republic of Germany. Without them some sectors of the economy (such as gastronomy) would suffer a severe shortage of personnel. At present, foreigners mainly work at jobs requiring only minimal vocational qualifications. In this connection, foreign children and adolescents present a grave problem as far as education and vocational training are concerned. On the one hand, without adequate education and training their social and occupational prospects are poor in Germany, but on the other hand, because of the drastic decline and stagnation in the birth rate of the German population, in the future Germany will urgently need to utilize the reservoir of skills which the foreign sections of the population have to offer.

The following shows the distribution of foreign workers in 1989 (in the old Länder*) listed according to size:*

Turks	**562 000**
Yugoslavs	**301 000**
Italians	**179 000**
Greeks	**102 000**
Spaniards	**62 000**
Portuguese	**40 000**

Source: Federal Statistical Office, Statistisches Jahrbuch 1990, p. 109

It can be seen that the Turks make up the largest group by far; as far as children and young people are concerned they, together with the Greeks, present a particularly difficult problem when it comes to educational and vocational integration. In contrast, the narrow cultural gap between Italy and Germany, for example, facilitates the integration of Italians. Not all male migrant workers bring their families to the Federal Republic of Germany; as a result males outnumber females in the foreign population. Of a total of 4 146 000 foreigners in 1987, only 1 848 000 (44.6%) were female.

The present and future vocational training problems associated with immigrants are and will be closely linked to how long the foreigners stay in Germany. If they stay for a long time, it is important and useful both in the interests of the foreigners as well as German society and the economy as a whole that as many migrants as possible undergo education and training. After all, in 1985 there were approximately 2 900 000 foreigners who had been in the Federal Republic of Germany for more than eight years.

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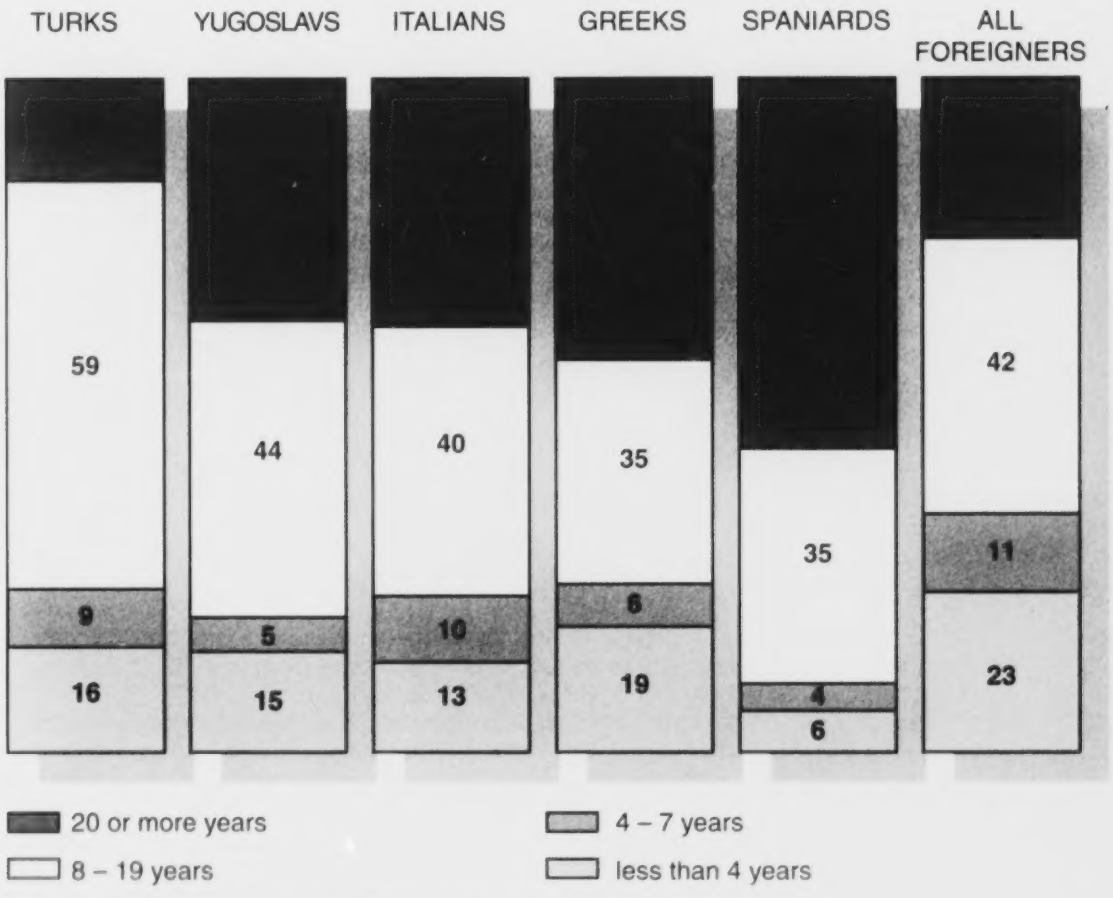
Length of stay of foreign population in Germany in 1990 (old federal* Länder *according to nationality)

Out of every 100 foreigners living in Germany in 1990



Source: Erich Schmidt Verlag, Zahlenbilder 35 300, 11/91
(as of 30 September 1990 for the old Federal Republic)

Resettlers

1.2.3.
Over the past few years, more and more Eastern Europeans of German descent have come to resettle in Germany. In 1990, a total of approximately 397 000 resettlers from Eastern Europe arrived in the Federal Republic of Germany, the majority of whom came from the Soviet Union, Poland and Romania. According to available data, these resettlers display an age structure which is favourable for the labour market. The group aged 26–44 predominates. Nevertheless, it is difficult to integrate these resettlers into the German labour market. Often they are not fluent enough in German to begin qualified vocational training directly after their arrival in Germany. Although many of these resettlers have already

received vocational training, their qualifications do not usually meet occupational demands in Germany. The reasons for this can be found in the:

- differences between the economic and social systems;
- differences between the education and training systems;
- variations in work organization structures;
- different levels of technological advancement and the respective standard of production technology (Berufsbildungsbericht 1991, p. 113).

At both federal and *Länder* levels, resettlers from Eastern Europe are being integrated into the German economic and social systems with the help of special programmes. Priority is being given to counselling work as well as language teaching and vocational measures of the Federal Labour Office in accordance with the Labour Promotion Law.

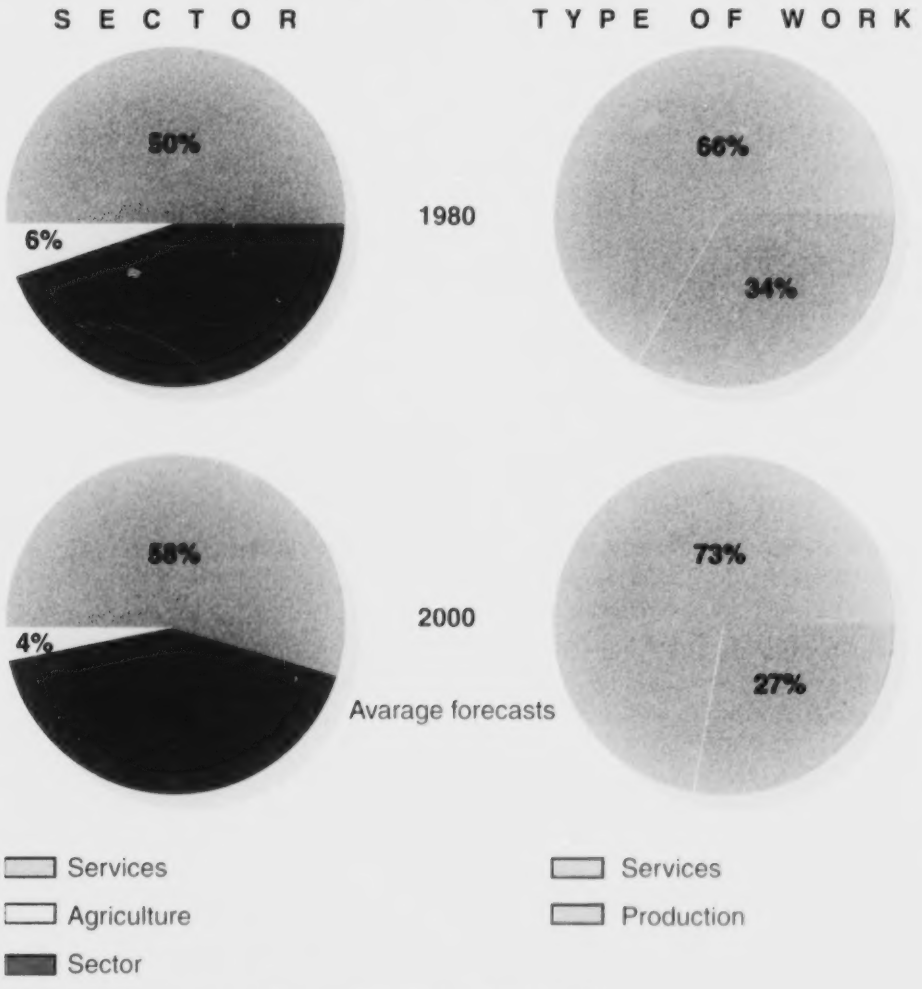
By the end of December 1989, about 344 000 resettlers from the former German Democratic Republic had been registered in the Federal Republic of Germany. These resettlers were young people on the whole. As German-speakers with good vocational training and professional experience, they have had much less trouble integrating into social structures and the labour market than resettlers from Eastern Europe.

1.3. The economy and employment

Due to a relative shortage of domestic raw materials, Germany is largely dependent upon exports to ensure its economic standing. In 1990, it exported goods worth roughly DM 1 317.5 billion (approximately ECU 642.7 billion), i.e. about 28% of the gross national product which in the same year totalled DM 4 972.3 billion or ECU 2 425.5 billion. This makes Germany one of the three largest exporting nations of the world alongside the USA and Japan. The German share of world exports rose by 3% between 1984 and 1990 to 12% while Japan slid back 0.5% and thus could claim 8.4% of world exports during the same time period. The most important export branches are the chemical industry, the automobile industry as well as the mechanical and systems engineering sectors. About 55% of the turnover of West German mechanical engineering companies comes from exports, and in 29 of 42 specialized branches, German mechanical engineering companies have secured the largest share of world-wide exports. With 1 160 000 employees (1990), the mechanical and systems engineering industry is the largest industrial employer in West Germany. In the former German Democratic Republic, mechanical and systems engineering was also the largest branch of industry. Since unification of the two German states and the collapse of the primary markets of the new federal *Länder*, the volume of production has dwindled considerably in these *Länder* because the readjustment process is still far from over. The number employed plummeted from 550 000 before unification to just short of 370 000 (June 1991).

Although the production sector as a whole continues to be highly important, Germany is losing the character of an industrial society more and more and is becoming more and more a service society. This statement is in any event accurate when we address the question of how many people are employed in what branches of the economy.

Percentage of the gainfully employed according to sectors and type of work (service or production): in 1980 and forecast for 2000 (excluding trainees)

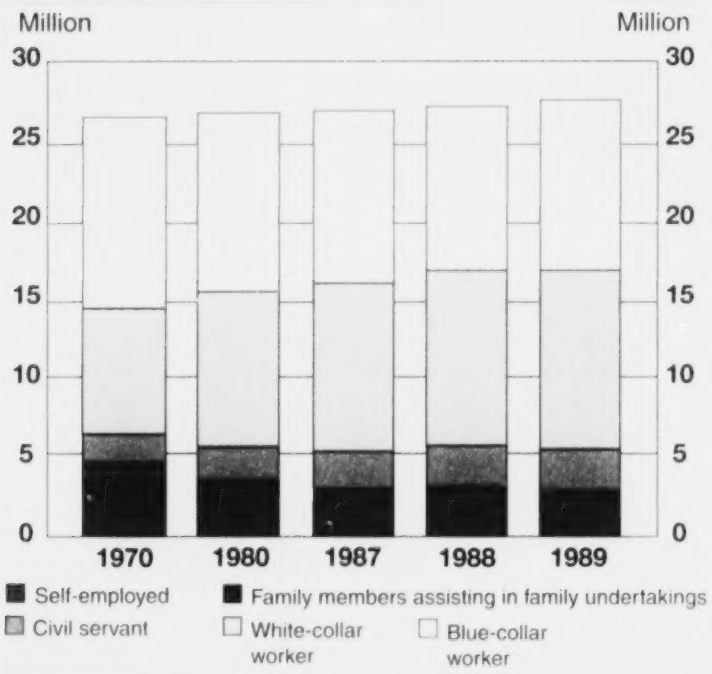


Source: IAB/Prognos-Projektion (Prognos AG 1986)

As we can see, the percentage of those gainfully employed in trade and transport and other services is markedly higher than the percentage employed in the production sector. Judging by the number employed, agriculture, forestry, livestock farming and the fishing industry play only a minimal role.

If we look at the number of those gainfully employed in terms of their occupational status, we see that by far the majority of the workforce is dependently employed, as is the case in the other large industrialized nations. The number of family members assisting in farming and craft trade has decreased dramatically. Since 1950, a marked restructuring has occurred among the gainfully employed with regard to both the economic sector in which they are employed and their occupational status. Until quite recently, the absolute number of gainfully employed remained relatively constant.

Gainfully employed population according to occupational status



Results from the 1970 and 1987 population and occupation censuses. Results of the Microcensus for the remaining years – Former Federal Republic of Germany.

Source: Federal Statistical Office, Statistisches Jahrbuch 1991, p. 119

The following figures allow a comparison between the Federal Republic of Germany (old federal *Länder*) and the EC in matters of employment.

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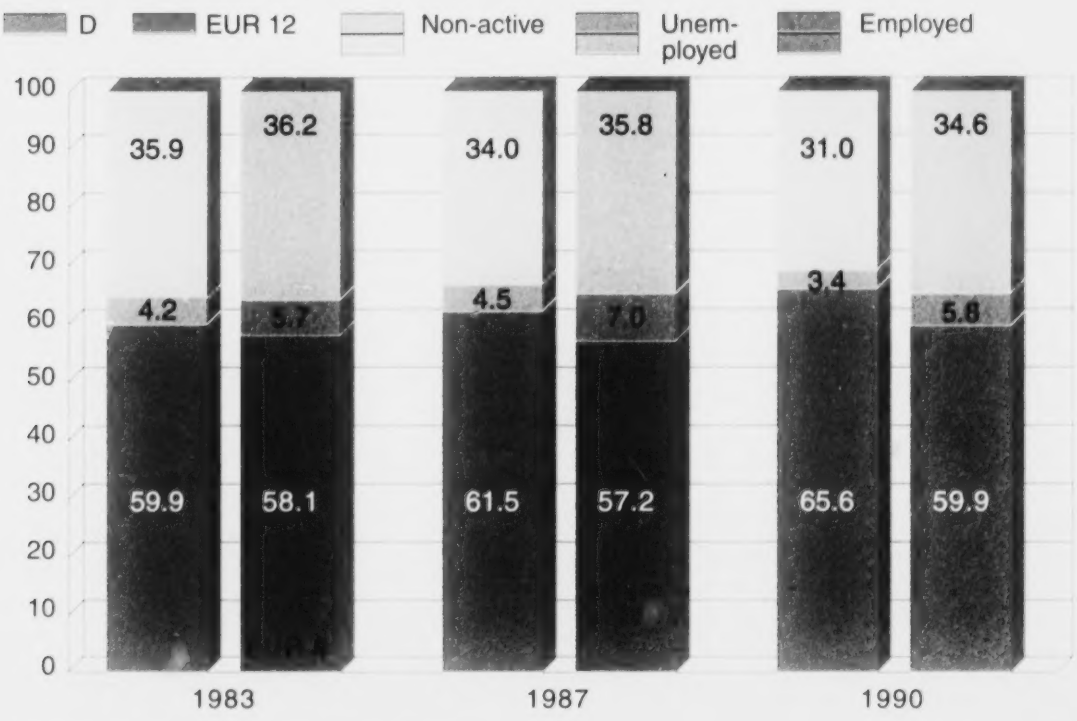
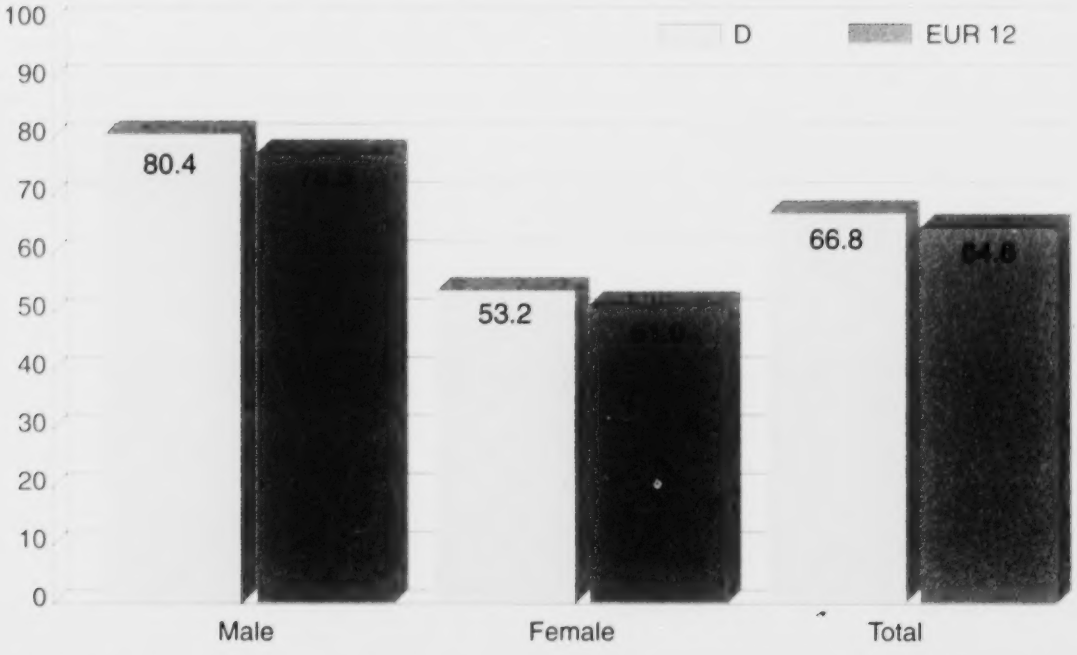
Population aged 14 – 64 according to economic status 1983/1987/1990 in %



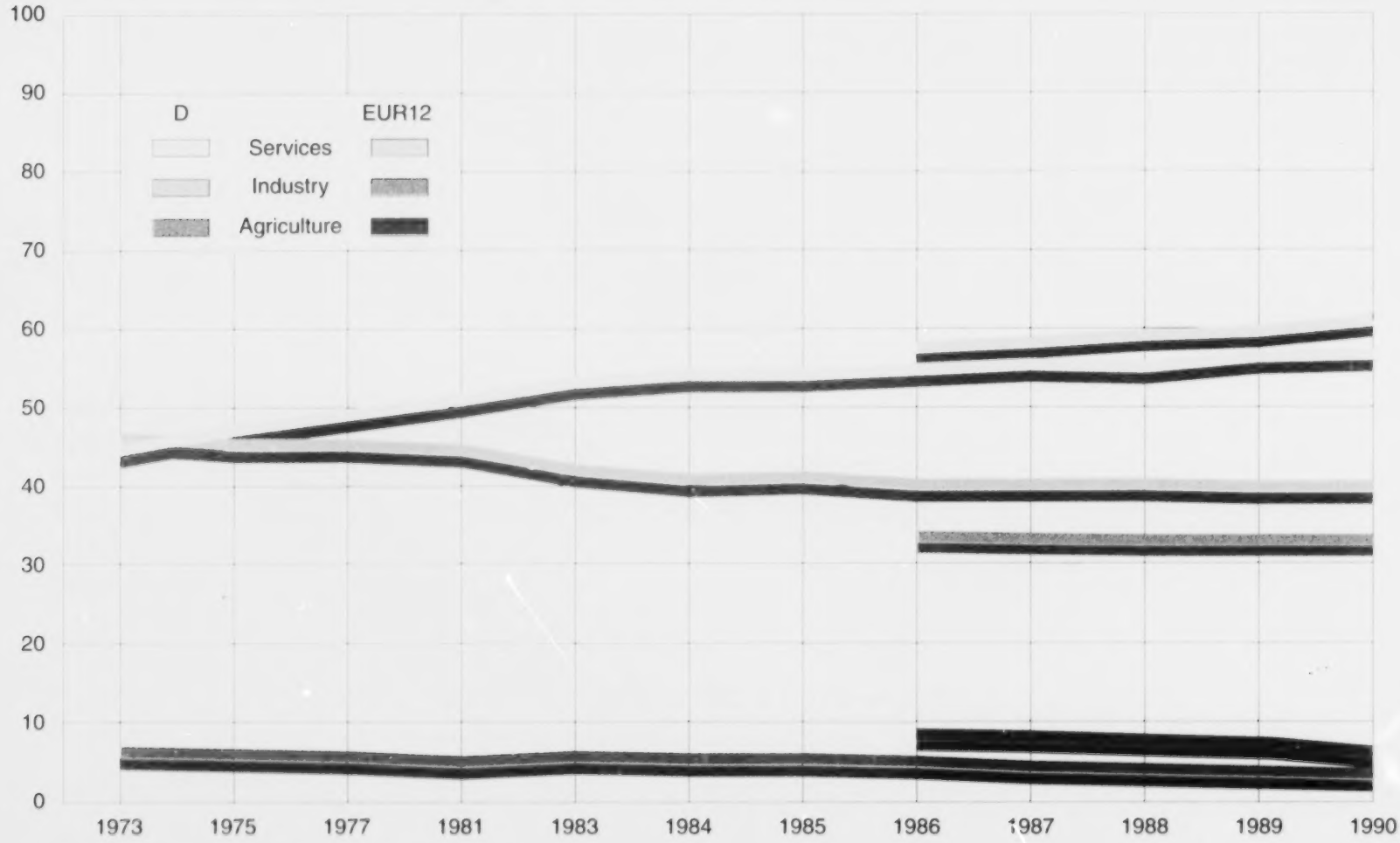
Source: Eurostat – Labour Force Surveys

Activity rate of population aged 14 – 64 in 1988 in %



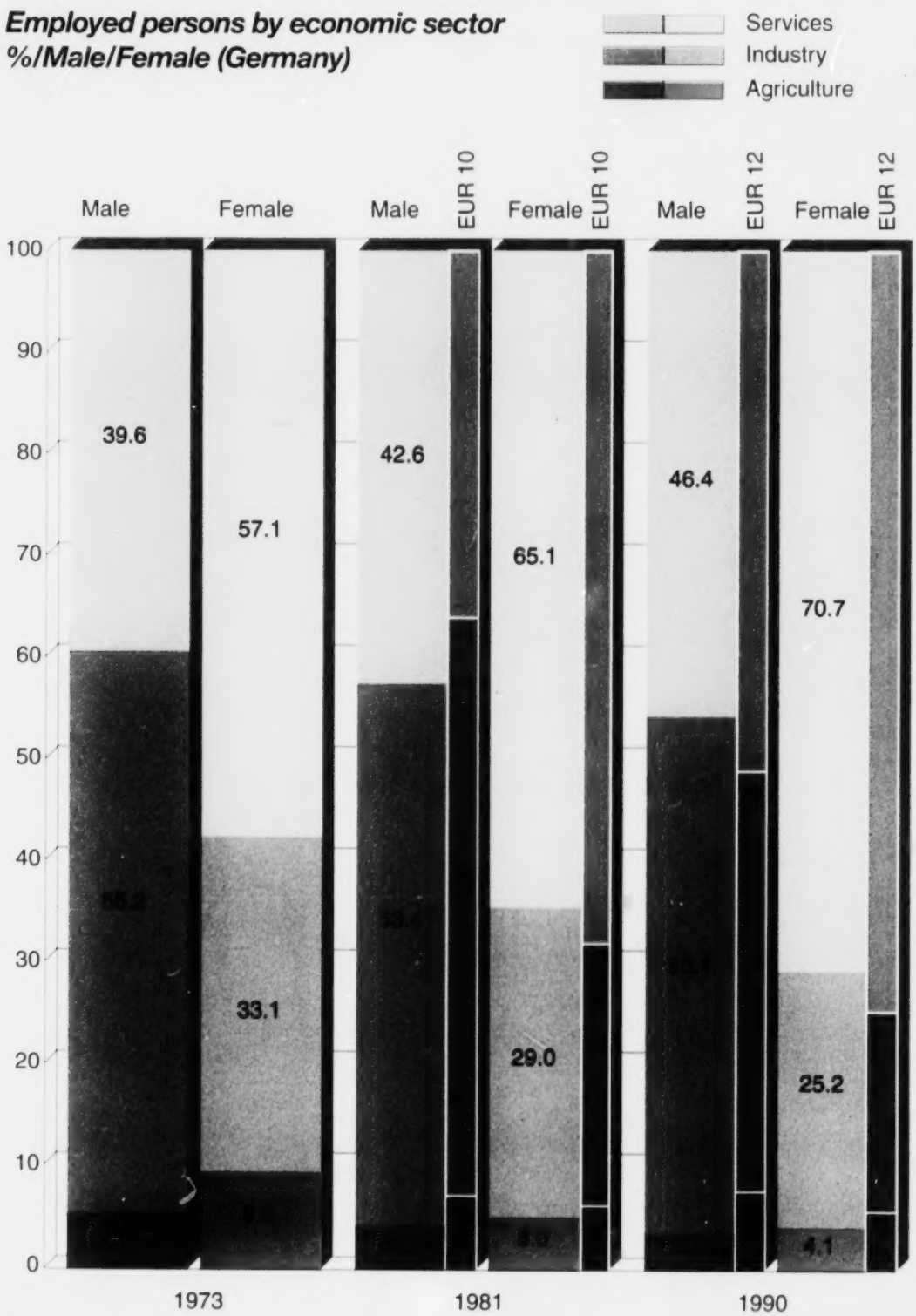
Source: Eurostat – A Social Portrait of Europe 1991

Employment by economic sector (in %)



Source: Eurostat – Labour Force Surveys 1980–1991

Employed persons by economic sector %/Male/Female (Germany)



Source: Eurostat – Labour Force Surveys

Unemployment

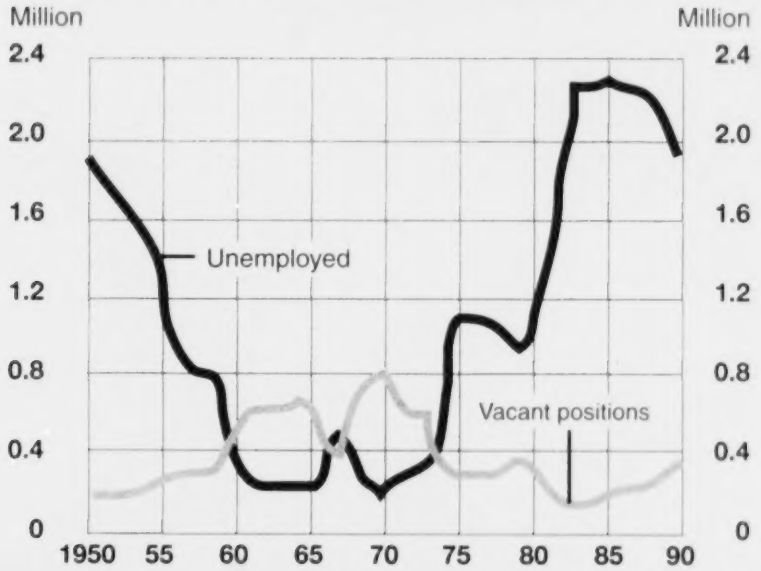
1.3.1.
Whereas Germany enjoyed virtually full employment from the 1960s until the early 1970s (with one brief interruption), since the mid-1970s unemployment has become a serious labour market and social problem in the Federal Republic of Germany.

Gainfully employed and unemployed persons 1985-1990 (in thousands)

Year	Labour force							
		Gainfully employed					Unemployed	
				of which:				
				Foreign workers		Short-time workers		
	total	total	female	total	female	total	total	female
1985	28 897	26 593	10 306	1 568	484	234.5	2 304	1 015
1986	29 188	26 960	10 455	1 570	483	197.4	2 228	1 028
1987	29 386	27 157	10 581	1 577	486	278.0	2 229	1 021
1988	29 608	27 366	10 750	1 610	501	207.6	2 242	1 043
1989	29 771	27 733	10 963	1 678	520	107.9	2 038	968
1990	30 327	28 444	11 414	1 775	571	55.8	1 883	915

Source: Federal Statistical Office, Statistisches Jahrbuch, 1991, p. 119

Unemployed persons and vacant positions



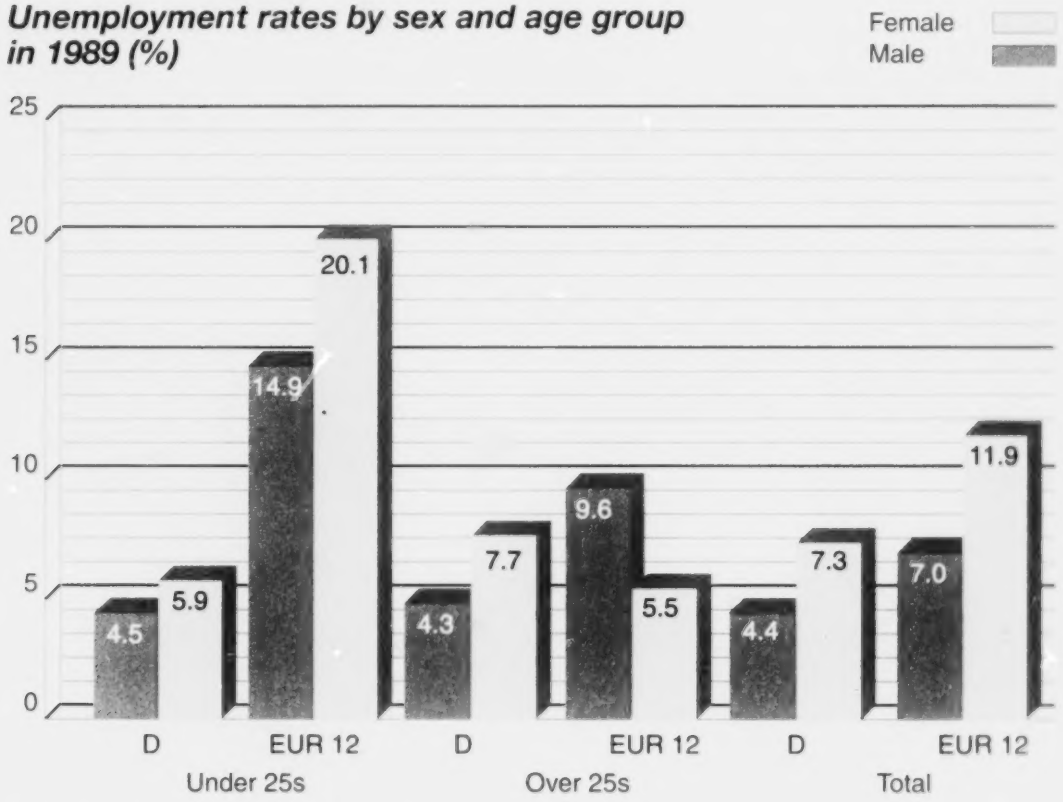
Excluding the Saarland until 1958 – Former Federal Republic of Germany

Source: Federal Statistical Office, Statistisches Jahrbuch 1991, p.119

With the unification of the two German states, the dissolution of the Council for Mutual Economic Assistance (Comecon - economic association of Eastern bloc countries), the loss of the old markets and the restructuring of the planned economy into a market economy, the unemployment rate in the new federal *Länder* has risen by leaps and bounds and is currently higher than in the old federal *Länder*. At the end of January 1992, the unemployment rate was 16.5% in the new federal *Länder* and 6.3% in the old.

The following figure shows a comparison of the unemployment rates in the Federal Republic of Germany (old Federal *Länder*) and the EC:

Unemployment rates by sex and age group in 1989 (%)



Source: Eurostat – A Social Portrait of Europe 1991

1.4. The education system — an overview

Before we can understand the vocational training system of a country, we first need to know something about the important structural features of the education system in general. The way in which vocational training is organized and the bias it has is related to the other areas of education. As already mentioned, the individual *Länder* are responsible for schools and institutions of higher education in the Federal Republic of Germany. This also applies to the full extent to the five new *Länder* that joined the 11 which made up the Federal Republic prior to unification. In the new *Länder*, the education system has only been partially restructured so far and in some matters, the competent authorities are striving for entirely new solutions. Consequently, the substance of the following section is based on conditions in the old *Länder*. While these will on the whole serve as a model for the new *Länder*, they will not be emulated in every detail.

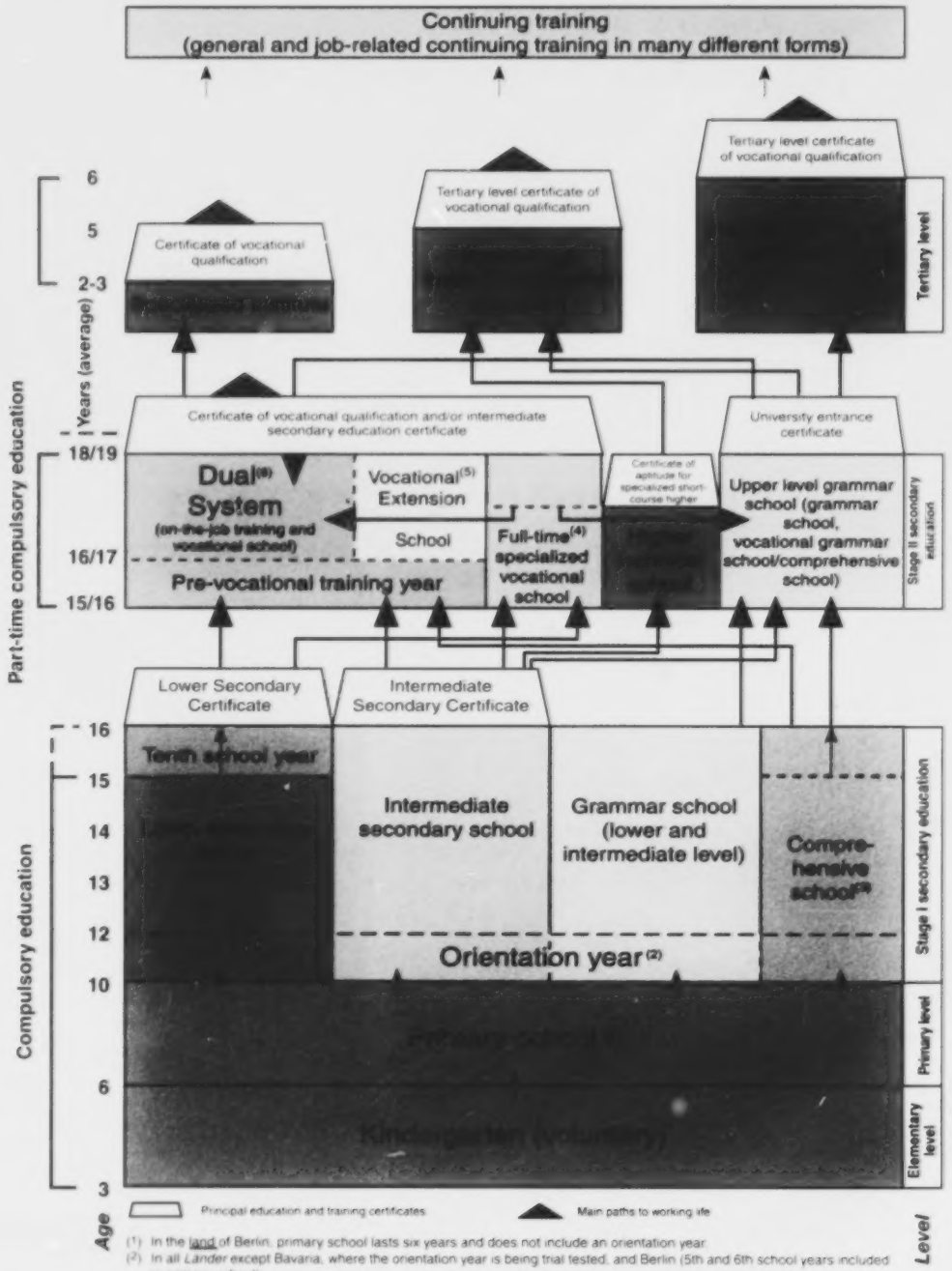
Structural features of the education system

1.4.1.

In the Federal Republic of Germany, the vast majority of schools, whether general education or vocational, and universities are state institutions. Private schools and other private educational establishments are covered by special *Länder* laws which govern their authorization, state recognition and financial support. From the number of pupils and students enrolled at private institutions, it is clear that this type of school plays a minor role in education. Of the 1 054 200 pupils attending general education schools in 1990, a mere 18 400 (1.7%) attended private schools, and only 72 700 (8.4%) of the 864 600 intermediate secondary school pupils went to private schools.

- Compulsory schooling begins at the age of six. In most *Länder*, the general mandatory period of full-time education is nine years, but in Berlin, Brandenburg, Bremen, and North Rhine-Westphalia compulsory education lasts 10 years. In addition, all young people who do not proceed to another full-time general education school (e.g. a grammar school) after completing their mandatory schooling are required to attend a vocational school, usually for three years, regardless of the *Land* they live in.
- In most *Länder*, religious instruction is a regular subject guaranteed by the Constitution and taught in all schools.
- Pursuant to the Basic Law (Articles 30 and 70, 'cultural and educational autonomy' of the *Länder*), the *Länder* are responsible for both general and vocational training schools.
- Responsibility for vocational training provided outside the schools, and in particular in enterprises, rests with the Federal Government.
- Pre-school education (kindergarten, school kindergarten, preparatory year) is either not connected at all or very loosely linked to the state education system. The main responsibility here is shouldered by voluntary welfare organizations. Attendance at pre-schools is voluntary.
- A differentiated system of special schools exists. Children and young people with learning problems, the mentally handicapped, the physically handicapped, the blind and visually impaired, the deaf and hearing impaired, children with speech difficulties or behavioural disturbances can all attend a school specialized to cater for their particular learning problems.
- Sometimes handicapped pupils are also integrated into regular general education schools.
- Attendance at all general and vocational education schools as well as institutions of higher education is free of charge in all *Länder*. This does not apply to certain private schools.
- In cases of need, pupils attending a general education school beyond the compulsory period or a vocational training school, and students are granted an education allowance as regulated by the Federal Law on Education and Training Promotion of 26 August 1971. Special regulations exist in each of the *Länder* to aid pupils who are not eligible for allowances according to federal law. In individual *Länder*, the granting of an education allowance also depends on the candidate displaying special talents and achievements in addition to financial need.
- Regardless of need, apprentices receive a training remuneration based on collective wage agreements.

Simplified presentation of the education system and the main training paths and qualifications



(1) In the land of Berlin, primary school lasts six years and does not include an orientation year.
(2) In all *Länder* except Bavaria, where the orientation year is being trial tested, and Berlin (5th and 6th school years included in primary school).
(3) Some *Länder* have 'regular' schools in addition to lower secondary, intermediate secondary and grammar schools. The remaining *Länder* have 'offer' schools, a special type of school association or pilot school project.
(4) Full-time vocational schools, differing in terms of their entrance requirements, duration and certificates awarded.
(5) Either part-time parallel to vocational school or full-time after completing vocational school.
(6) Depending on educational background (lower Secondary, intermediate secondary or grammar school). The age of the trainees varies greatly according to when they enter and whether the training period is shortened. However, the majority are over 19 years of age when they complete the dual system.

Source: Münch / CEDEFOP

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General education schools

1.4.2.

General education is characterized by a primary stage common to all pupils, followed by a secondary level which builds on the primary stage and branches out vertically into the three forms of secondary school (lower secondary school, intermediate secondary school, grammar school). Variations on this three-pronged school structure can be found in the following general schools at stage I secondary education:

- In Brandenburg, comprehensive, grammar and intermediate secondary schools;
- In Saxony, Saxony-Anhalt and Thuringia, grammar schools and another type of school referred to under different names (middle school, 'regular' school, secondary school).

While lower secondary school (fifth or seventh to ninth school year, or fifth to tenth school year), intermediate secondary school (fifth to tenth school year) and the lower level of grammar school (fifth to tenth school year) are assigned to the so-called stage I secondary education, the upper level of grammar school (eleventh to twelfth or thirteenth school year) is classified as stage II secondary education. Thus, the structure of the general education system is characterized by forms of school which differ considerably in their demands and objectives, and by three school levels (primary, stage I and stage II secondary education).

Over the last 20 years, there has been a marked change in the numbers of pupils at the various secondary schools (lower secondary, intermediate secondary and grammar school), in favour of intermediate secondary schools and grammar schools. In the wake of this 'education expansion', the lower secondary school, which was originally called the *'Volksschule'* (school providing basic primary and secondary education), has ceased to attract large numbers of pupils.

Distribution of pupils at general education schools (fifth to tenth school year)

	Lower secondary	Intermediate secondary	Grammar	Comprehensive schools
1970	2 374 900	863 500	1 063 100	4 500
1975	2 510 400	1 179 900	1 394 500	143 900
1980	1 933 700	1 351 100	1 495 500	188 900
1985	1 332 500	1 049 000	1 110 200	178 200
1990	1 054 200	864 600	1 053 000	241 100

Source: Federal Ministry of Education and Science, *Grund- und Strukturdaten*, 1991/92, pp. 42 f

The table verifies the absolute and relative decline in the number of pupils attending lower secondary schools. In 1970, the number of pupils at lower secondary schools was more than twice as high as that of pupils in stage I at grammar schools (fifth to tenth school year), but in 1990 the number of pupils at grammar schools had almost reached the number attending lower secondary schools. Compared to lower secondary schools, intermediate secondary schools also gained in relative importance. In anticipation of our report on vocational training, the central subject of this study, we should draw attention to the fact that the developments discussed above have resulted in a marked change in the educational level of candidates training within the framework of the dual system.

As far as the number of pupils is concerned, comprehensive schools, which combine lower secondary, intermediate secondary and grammar school into one, only play a minor role in general education. Of a total of 3 224 000 pupils in stage I secondary education, only 241 100 or 7.5% attended a comprehensive school in 1990.

Establishments of higher education

1.4.3.

Until the unification of the two German states, there were 248 establishments of higher education in the old Federal Republic, 62 of which were not state-run, and the former German Democratic Republic had 54 establishments of higher education (1988). At the present time, the higher education system in the new *Länder* is in the throes of a drastic reform (Bundesministerium für innerdeutsche Beziehungen, 1990, pp. 394 ff.), so that the description here of the higher education system in the Federal Republic of Germany will be based on the model of the old federal *Länder*, as is outlined briefly here. Establishments of higher education can be classified according to the following types:

Establishments of higher education according to type and number of students attending them (1990)

Type of establishment higher education	Number of of establishments	Number of students
Universities	70	
Comprehensive universities	6	
Teacher training institutions	8	1 155 300
Theological institutions	16	
Art colleges	31	24 200
Specialized institutions of higher education	98	343 000
Specialized institutions of administrative studies	24	39 600
Open university (Hagen)	1	29 900
Total	254	1 592 000

Source: Federal Ministry of Education and Science, *Grund- und Strukturdaten*, 1991/92

The theological institutions are not, as a rule, state institutions; there are teacher training institutions in only two *Länder*, Schleswig-Holstein and Baden-Württemberg; Comprehensive universities exist only in the *Länder* of Hesse (one) and North Rhine-Westphalia (five); they cover the course work of several types of establishments of higher education.

The prerequisite for admission to a university or other establishments of higher education (comprehensive universities, teacher training institutions, theological institutions) is the general or specialized university entrance certificate which can normally be gained after thirteen years at school. Most courses of study at universities last four years. There are art colleges for fine arts, design, music,

film and television. Students are admitted to these mainly on evidence of special talent or through aptitude examinations.

The specialized institutions of higher education derived from the former higher technical schools (schools of engineering, higher schools of economics, etc.) at the end of the 1960s. The prerequisite for admission to these is a certificate of aptitude for specialized short-course higher education, which can usually be acquired after 12 years of schooling, in most cases at a higher technical school. More and more students have acquired their general or specialized university entrance certificate, however.

The courses of study at specialized higher education institutions differ from those at universities in that they are more strongly application- and practice-oriented and normally only last three years. Depending on how the semester of on-the-job training is integrated, a course of study may last up to approximately four years in the different *Länder*. In practice, however, the time spent studying at a specialized institution of higher education is substantially longer. In 1989 the average period of study from initial matriculation to graduation was 5 years.

Over the last three decades, the higher education system of the ('old') Federal Republic has seen its universities and other establishments of higher education increase both in number and size, as has been the case in other countries too. Between 1975 and 1990, the number of universities grew from 49 to 70. The number of students both at individual institutions and in general also increased significantly. The universities with the highest number of enrolled students (as of 1987) are the University of Munich with 62 100 students, the Free University of Berlin with 56 400 students and the Cologne and Münster Universities with 47 200 and 43 700 students respectively. In the old Federal Republic, there were about 291 000 students in 1960 and about 1 600 000 in 1990.

Worthy of note is the growing proportion of female students among the student population as a whole. In 1960 only 27.9% of university students were female while their share had increased to 41% in 1990. At specialized institutions of higher education, however, the percentage of females was markedly lower, totalling only 29.1%. This has to do with the fact that the focus is on technical subjects. Unlike in the former German Democratic Republic, women are clearly under-represented in the natural sciences, too, with the exception of biology.

Financing of the education system

1.4.4.
The two following figures indicate how much of the GDP (in percentage) public authorities in Germany (Federal government, *Länder* and municipal councils) spent on education between 1986 and 1989. They likewise show the per capita amount spent (in purchasing power standard) on education in the Federal Republic and in the Member States of the European Community in 1985.

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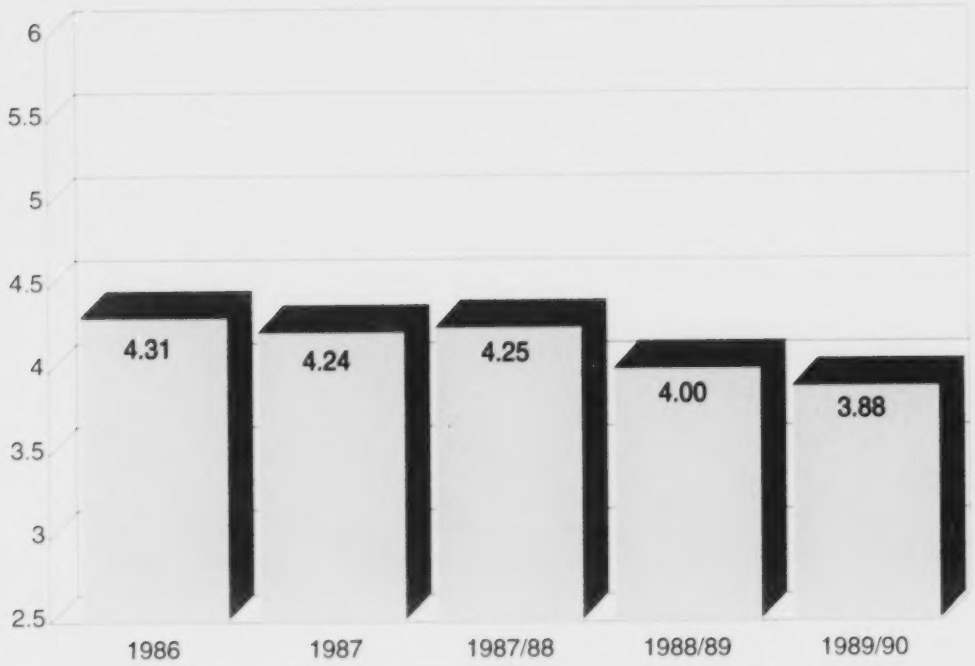
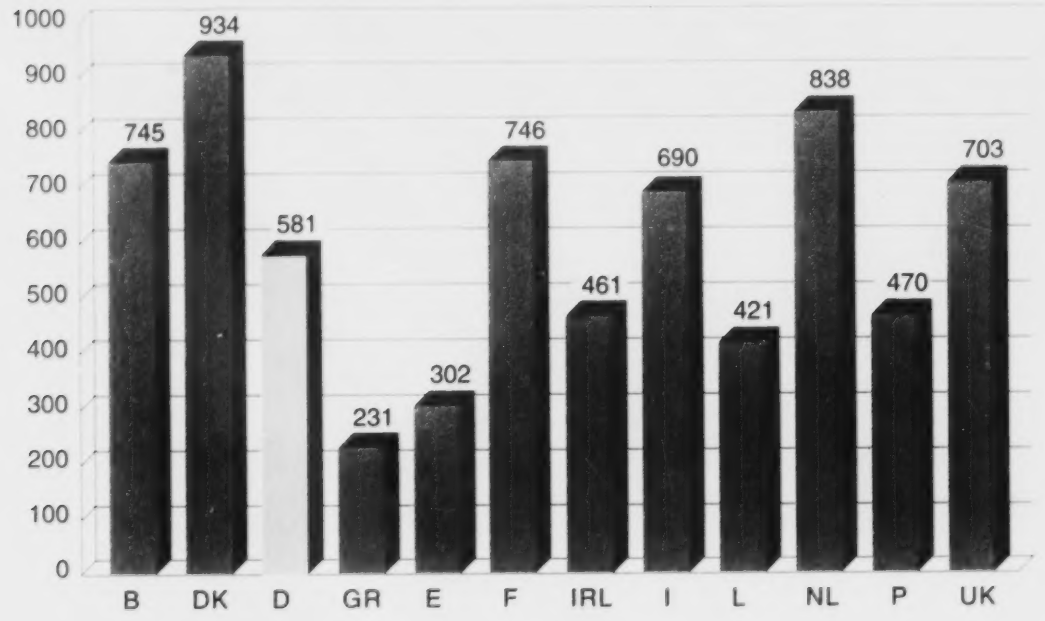
Public expenditure on education in Germany as a % of GDP



Source: OECD: Education in OECD countries 1986/87 and 1987/1988
OECD in figures (Edition 1991), 1992 en 1993)

Public expenditure on education per head of population in 1985 (in PPS-Purchasing Power Standard)



Source: Eurostat – A Social Portrait of Europe 1991

2 THE HISTORICAL DEVELOPMENT OF VOCATIONAL TRAINING IN GERMANY

2.1. From the Middle Ages to the beginning of the 19th century – the heyday and decline of apprenticeship training

The original form of vocational training was the master craftsman teaching his apprentice. In Germany, as in other countries, this dates back to the early Middle Ages. The earliest document in Germany referring to guild-regulated apprenticeship training is most probably the ordinance of the Cologne wood turners dated 1182. By the end of the 13th century, apprenticeship training was widespread and remained a craft apprenticeship until the middle of the 19th century. The master/craftsman apprentice form of learning a trade reached its prime in the late Middle Ages. This was the heyday of the apprentice learning systematically from his 'master' until he became a journeyman and finally a master craftsman himself.

Apprenticeship training was subject to the strict control of the guilds, with each guild having its own regulations. The regulations laid down the age of admission to an apprenticeship (between the ages of 11 and 17 depending on the guild regulations) and the duration of training (average of about 4 years), the trial period (between 2 and 4 weeks), the journeyman's examination and the (ceremonial) procedures of 'releasing' apprentices into the trade. The guilds also regulated the personal requirements that had to be met, such as legitimate birth, before a candidate might be admitted as an apprentice.

By the 16th century, however, the guilds and apprenticeship training had degenerated into a deplorable state. In the 16th and 17th centuries, the authorities issued numerous ordinances which were intended to remedy the unsatisfactory situation but they met with little success. The guilds finally disbanded, bowing to the impact of economic liberalism and the rise in manufacture and industrialization. Training of apprentices declined into 'exploitation of apprentices' with the disappearance of the guilds' regulating powers.

2.2. The 19th and 20th centuries – a new beginning and developments in apprenticeship training

At the beginning of the 19th century, two events accelerated the decline and finally the demise of the guilds:

- the Prussian town code of Freiherr von Stein (1808), which granted town communities far-reaching autonomy, eliminated the guilds as public bodies. As a result, they lost their political functions and could no longer participate in municipal elections.

- once freedom of trade was introduced (edict on the introduction of a general trade tax of 2 November 1810; Trade and Police Act of 7 September 1811), every guild could be disbanded by a majority vote and members were allowed to leave the guild. A trading licence was all that was needed to bond apprentices and journeymen.

This sealed the fate of regulated vocational training, i.e. apprenticeship training, which was the only form of vocational training at that time. The provisions of the Prussian Trade and Industry Code of 1845 as well as the Trade and Industry Code of the North German Federation issued in 1869 can be regarded as a first albeit tentative attempt to improve matters. More successful in the sense of a turn for the better in training apprentices in craft trades were the 1897 and 1908

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amendments to the Trade Code. The Trade Code amendment of 1897 (Protection of Craftsmen Law) once again granted the trade guilds, as they were now called, corporate rights. The amendment of 1908 introduced the 'limited certificate of competence' required for training apprentices in the craft trades. Under this amendment, an employer in a newly formed training enterprise wishing to provide training had to furnish proof of his qualifications as a master craftsman.

Since its advent in the early 19th century, industry mainly recruited its workforce from the craft trades and agriculture and conducted only the absolute minimum of training while running a system of highly mechanized division of labour. From the last third of the 19th century, industry and commerce increasingly based their vocational training on the model of the craftsmen apprenticeship. It became evident that learning exclusively at industrial workplaces could no longer ensure comprehensive occupational qualifications because the division of labour, typical of industry, resulted in too highly specialized activities.

This realization gave birth to the idea of the training workshop, making it possible to impart knowledge and skills in a planned and systematic way across the breadth of the entire occupation. Initially, around the turn of the century, the training workshop as a supplementary learning site to the workplace found only halting acceptance. In 1926, for example, there were only 68 training workshops, the majority of which were run by the metalworking industry. Apart from these training workshops, another 107 were under the direction of the *Reichsbahn* (the railways). The Prussian State Railways and later, the *Deutsche Reichsbahn*, could be regarded as the pioneers in the development and establishment of training workshops in Germany.

Under the rule of the National Socialists, i.e. from 1933 onwards, the number of training workshops rose rapidly, partly as a response to the drive for economic self-sufficiency. While in 1936 there were only 691 training workshops of this kind, their number had risen to 3 304 by 1940 and had reached about 5 000 by 1944. However, these numbers also include the so-called 'training corners' that might be described as 'mini-training workshops'.

The rise of natural sciences and modern technologies no longer based on conventional ones ushered in a decisive change in vocational training. Practical training could no longer be developed or improved any further without theory. It became increasingly necessary to have a theoretical foundation on which to base practical work. Theory, in turn, could no longer be learned solely through experience. Thus, classes had to be held in addition to practical training. In the 19th century, this task was assumed by the further training schools.

The origins of this school, which eventually became today's vocational school, can be traced back to the Sunday schools founded principally in the 18th century. Whereas religious Sunday schools in Prussia provided school lessons after church service for those who had not completed their elementary schooling, the Württemberg industrial Sunday schools were guided by the principle of occupationally oriented theoretical lessons. These schools taught arithmetic, drawing, mechanics and general technology. While the religious Sunday schools were committed above all else to Christian ethics, the industrial Sunday schools were orientated to the ideas of the Enlightenment and mercantilism and understood the necessity of combining practice with theory and throwing light on the connections between the two.

In the course of the late 19th century, general further training schools developed out of the religious Sunday schools, and as early as the first half of the 19th century, industrial further training schools had emerged from the industrial

Sunday schools. The general further training schools also taught the theoretical foundations related to the apprentices' occupations. Yet this occurred to an even greater extent in the industrial further training schools where industrial-political aspects were also systematically incorporated. In the course of the 19th century, the objectives and contents of both types of further training schools were brought into line, with part-time schooling to accompany training becoming the norm. At that time, pupils usually attended this school in the evening.

The Trade and Industry Code of the North German Federation enacted in 1869 underlined the generally recognized importance of the further training schools. This code contained a regulation on the local introduction of compulsory further education for young people employed in industry and commerce:

Under the by-law (§ 142) journeymen and apprentices under the age of 18, or individual classes of such persons can be required to attend a local further training school while employers and masters are obliged to grant the necessary time for such attendance.

Although initially the communities were slow to take advantage of this opportunity to oblige young people to attend a further training school, further education was compulsory under the by-law in most large towns by around 1900. In 1873, Saxony became the first German *Land* to introduce compulsory three-year further education for boys. It was no longer at the discretion of the communities to make young people attend a further training school.

Although the Reich Constitution of 1919 (known as the Weimar Constitution) postulated compulsory further education up to the age of 18 (Art. 145), for various reasons, not all German *Länder* passed the laws necessary to implement this concept. Attendance at vocational schools was not made compulsory throughout Germany until the Reich Compulsory Education Act of 6 July 1938 came into force. As was the case in imperial Germany and during the Weimar Republic, under the Basic Law of 23 May 1949, German *Länder* are responsible for legislation in the field of education and consequently for compulsory schooling. Since the Federal Republic of Germany was founded, full-time general schooling and part-time vocational schooling have been compulsory in all the *Länder*. Because it is mandatory for all young people undergoing training in an enterprise and for all young people who are employed but have not yet reached the age of 18 to attend a vocational school, the vocational school has become the most important vocational training school.

The history and development of full-time specialized vocational schools and specialized institutes which provide vocational qualifications are complicated and, to some extent, interwoven, because it was only in relatively recent times that a clear differentiation was made between these two types of schools (and vocational schools) through an ordinance issued by the Reich Minister for Education on 29 October 1937.

The beginnings of the full-time specialized vocational schools and the specialized institutes can be seen in the 14th-century schools which taught reading, writing and arithmetic. The knights' academies of the 17th and 18th centuries, viewed from today's standpoint, were specialized institutes. They trained the sons of nobility to work in building, agriculture and the crafts, in administration and the army.

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The 'Technical Institute', which was opened in Berlin in 1821 and later became the University of Technology, was by today's standards a full-time specialized vocational school. The provincial trade schools founded in Prussia in the first half of the 19th century can be regarded as the precursors of both the full-time specialized vocational schools and the specialized institutes. The former schools of engineering and higher schools of economics dating back to the 19th century were regarded as higher technical schools and classified as vocational training schools until 1969 when they became specialized institutions of higher education.

2.3. Upgrading and regulation of vocational training since the founding of the Federal Republic of Germany (1949)

The ideas and suggestions of the Allied Forces to change the education and vocational training systems after the Second World War did not strike an overly positive chord with the politicians responsible for education and vocational training. Thus, the two core areas of the German education system in particular, i.e. the three-prong system of general education schools on the one hand and apprenticeship training on the other, were first reconstructed and then further developed. Therefore, we can speak of a virtually uninterrupted continuity within cooperative vocational training in enterprises and vocational schools. This system of cooperation between enterprises and vocational schools in initial vocational training (apprenticeship training) has, in fact, existed since the founding of the vocational further education schools, the forerunners of today's vocational schools. Yet, the term dual system, which is commonly used today, is relatively new. In its Report on Vocational Training and Education (Gutachten über das berufliche Ausbildungs- und Schulwesen) (1964), the German Commission for Education (1953-65) referred to 'dual' training on the job and at school (vocational school). Since then, the expression dual system has been become generally accepted in both vocational teaching circles and in discourse on vocational training policy, not only at national but also at international level, despite the fact that it is neither a fitting nor adequate name for this phenomenon (see paragraph 3.2.3.).

Since the Federal Republic of Germany was founded, the dual system has met with general approval, despite some criticism on certain points. The approval has resulted from improvements and further development of material conditions, personnel and concepts:

- modern school buildings with appropriate technical facilities were erected to replace the vocational schools which had originally been housed in vacated buildings of elementary and intermediate secondary schools;

- the training of vocational school teachers was raised to academic level (training at universities);

- vocational training in enterprises became comprehensively regulated on the basis of the Vocational Training Act of 14 August 1969;

- on the basis of this Vocational Training Act, a regulation was issued on vocational and teaching suitability of trainers in enterprises for vocational training in trade and industry;

- the number of recognized training occupations was reduced and the training regulations for these occupations were updated;

- a procedure to harmonize the training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972 was adopted on 8 August 1974. This was an important step in improving the coordination between what trainees learnt in the enterprises and at vocational schools.

In terms of numbers, the dual system reached its peak at a time when young people born during the baby boom had to be supplied with training places. While the number of apprentices fluctuated between 1 200 000 and 1 300 000 from 1960–1975, it reached a record high of more than 1 800 000 in 1985 in the old federal *Länder*. In 1989, there were still 1 552 000 apprentices, but in 1990 the number dropped to 1 477 000.

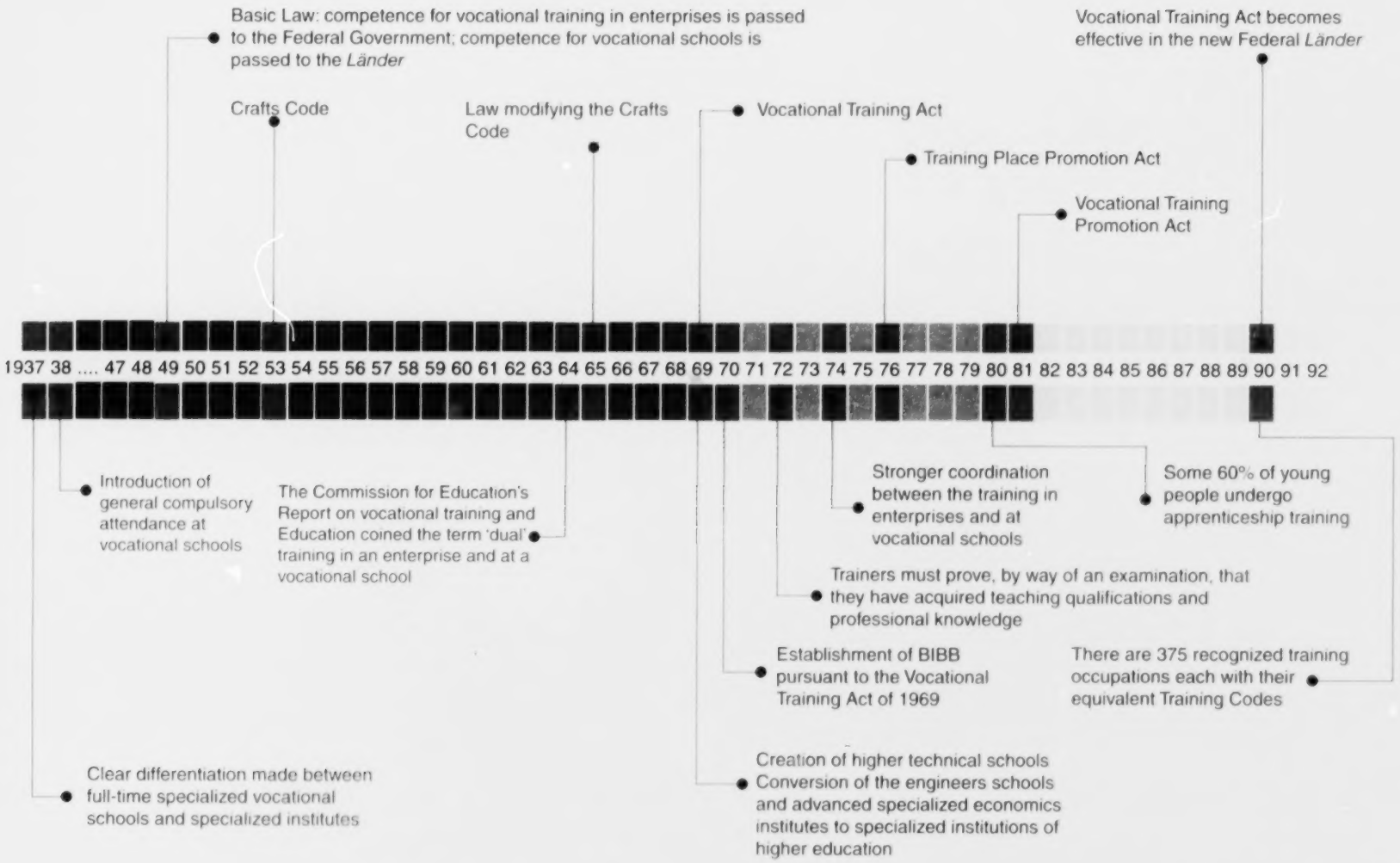
2.4. Unification (1990) — a challenge to vocational training policy

Since vocational training in the former German Democratic Republic has the same historical roots as vocational training in the Federal Republic of Germany, it would be interesting and informative to sketch the different developments within the two German states after the Second World War. Regrettably this is not possible here for space reasons. We should nevertheless point out some major differences and at least outline the current development in the new *Länder*.

First of all we should bear in mind that one tradition of vocational training was never altered in Germany, or in the former German Democratic Republic either, despite its totally different state, political, social and economic framework conditions. This was and is the combination of practical training at an enterprise with theoretical instruction at a vocational school. Against the backdrop of the Marxist-Leninist ideology that prevailed in the former German Democratic Republic, a centralist state constitution, a planned economy and the transformation of private enterprises into nationally-owned enterprises, there were, however, considerable differences in how the principle of apprenticeship training was organized and conducted. The most important differences were:

- training at the workplace and instruction at vocational schools were centrally controlled by an independent State Secretariat for Vocational Training;
- about 80% of all theoretical vocational training was given in the 936 in-house vocational schools as opposed to the mere 239 non-enterprise vocational schools that were run by the municipalities;
- in 1957 in-house vocational schools were placed under the direct control of the enterprises. As a rule, the enterprises were not only responsible for theoretical training and instruction but also for practical training, polytechnic instruction and adult education;
- in addition to the 936 in-house vocational schools, there were 755 academies run by enterprises. These provided further training and retraining not only to their own staff but also to employees of other enterprises;
- a large proportion of apprentices lived in boarding schools (1 300 altogether). In 1989 boarding schools could accommodate one in every three apprentices;
- in contrast to the Federal Republic of Germany, all vocational training institutions, including those in enterprises, were run by the state (Autsch et al., May 1991, p. 10).

Evolution of the training system (Germany)


Basic Law: competence for vocational training in enterprises is passed to the Federal Government; competence for vocational schools is passed to the *Länder*
Crafts Code
Law modifying the Crafts Code
Vocational Training Act
Training Place Promotion Act
Vocational Training Promotion Act
Vocational Training Act becomes effective in the new Federal *Länder*
1937 38 .... 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92
Introduction of general compulsory attendance at vocational schools
The Commission for Education's Report on vocational training and Education coined the term 'dual' training in an enterprise and at a vocational school
Stronger coordination between the training in enterprises and at vocational schools
Some 60% of young people undergo apprenticeship training
Trainers must prove, by way of an examination, that they have acquired teaching qualifications and professional knowledge
Establishment of BIBB pursuant to the Vocational Training Act of 1969
There are 375 recognized training occupations each with their equivalent Training Codes
Clear differentiation made between full-time specialized vocational schools and specialized institutes
Creation of higher technical schools
Conversion of the engineers schools and advanced specialized economics institutes to specialized institutions of higher education

33

With the unification of the two German states on 3 October 1990, the federal state system was introduced into the region of the former German Democratic Republic (the founding or 'revival' of five *Länder*). The competence for vocational training in the enterprises was passed to the Federal Government and the competence for schools, including vocational schools, was passed to the new *Länder* just as in the rest of the Federal Republic.

2.5. Important dates — an overview

1182: ordinance of the Cologne wood turners; earliest record referring to regulated apprenticeship.

Late Middle Ages: golden age of the master craftsman/apprentice model.

16th - 19th century: decline of the guilds and with them, apprenticeship training. The guilds were disbanded under the impact of economic liberalization and increasing industrialization.

18th century: founding of religious Sunday schools (e.g. in Prussia) and industrial Sunday schools (e.g. in Württemberg). The Sunday schools are regarded as the precursors of vocational schools.

1869: trade and Industry Code of the North German Federation: regulation on the local introduction of compulsory further education for young people employed in industry and commerce.

Late 19th century: founding of general further education schools and industrial further education schools that showed similarities to today's vocational schools. The start of apprenticeship training in industry and commerce.

1900: the first training workshops; the Prussian State Railways and later, the Deutsche Reichsbahn were forerunners in developing and establishing training workshops in Germany.

Around 1900: vocationally-structured further education schools with specialized classes were established. These schools focused their teaching on the respective occupations of the pupils.

1919: the Tenth German Trade Union Congress in Nuremberg: the declaration on the regulation of apprentice training can be regarded as the first draft of comprehensive regulations governing apprenticeships and thus of a vocational training act.

Around 1920: the designation 'vocational school' became an accepted term for the further training school in official use as well as in educational circles.

1925: the German Committee for Technical Education, set up by employers, was the first to develop a uniform national 'regulatory instrument' for apprenticeship training.

Since 1935: recognition of training occupations and their regulatory instruments i.e. training regulations by the Reich Minister of Economics.

1938: the Reich Compulsory Education Act was enacted, introducing general compulsory attendance at vocational schools throughout Germany.

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1939: transformation of the German Committee for Technical Education into the Reich Institute for Vocational Training in Commerce and Industry which developed regulatory instruments for nearly 1 000 recognized skilled and semi-skilled apprentice occupations by the end of the war.

1947: offices set up by the Chambers of Industry and Commerce continued the work of the Reich Institute for Vocational Training in Commerce and Industry.

From 1953 onwards: the Office for on-the-job Vocational Training in Bonn continues work on the development of regulatory instruments.

1964: the German Commission for Education (1953-65) passed a Report on Vocational Training and Education and coined the term 'dual' for training in an enterprise and at a vocational school.

1969: German Education Commission made recommendations to improve apprenticeship training;

adoption of the Vocational Training Act which extensively regulates vocational training in enterprises in all branches of the economy. The Federal Institute for Vocational Training Research (BBF), called the Federal Institute for Vocational Training (BIBB) since 1976, took over the function of the Office for on-the-job Vocational Training in Bonn.

1972: issue of a regulation on the vocational and teaching suitability of vocational trainers in trade and industry. Trainers must prove, by way of an examination, that they have acquired the required specialized suitability, teaching qualifications and professional knowledge.

1974: adoption of a procedure for the harmonization of training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972.

1976: passing of the Training Place Promotion Act which was declared null and void by the Federal Constitution Court in 1980 because of its incompatibility with the Basic Law.

1981: passing of the Vocational Training Promotion Act that deals with regulations on vocational training planning and statistics and the vocational training report. It also regulates the legal status, tasks and organization of the Federal Institute for Vocational Training.

1990: unification of the two German states. The Vocational Training Act becomes effective in the new federal *Länder*.

INITIAL VOCATIONAL TRAINING

3.1. Definition

Initial vocational training includes those vocational qualification measures which:

- are generally aimed at school-leavers and are intended to provide qualifications in demand on the labour market;
- are acquired in a regulated and formal course of training and lead to a qualification as a skilled worker or qualifications basic to a broad occupational field;
- are aimed at occupational activities in the economy as well as in the health and social sectors.

Here we will not be dealing with qualifications acquired at establishments of higher education or at semi-skilled and orientation training given on the job. In view of the actual situation in Germany, a greater portion of this limited report will be devoted to initial training within the framework of the dual system rather than within the education system.

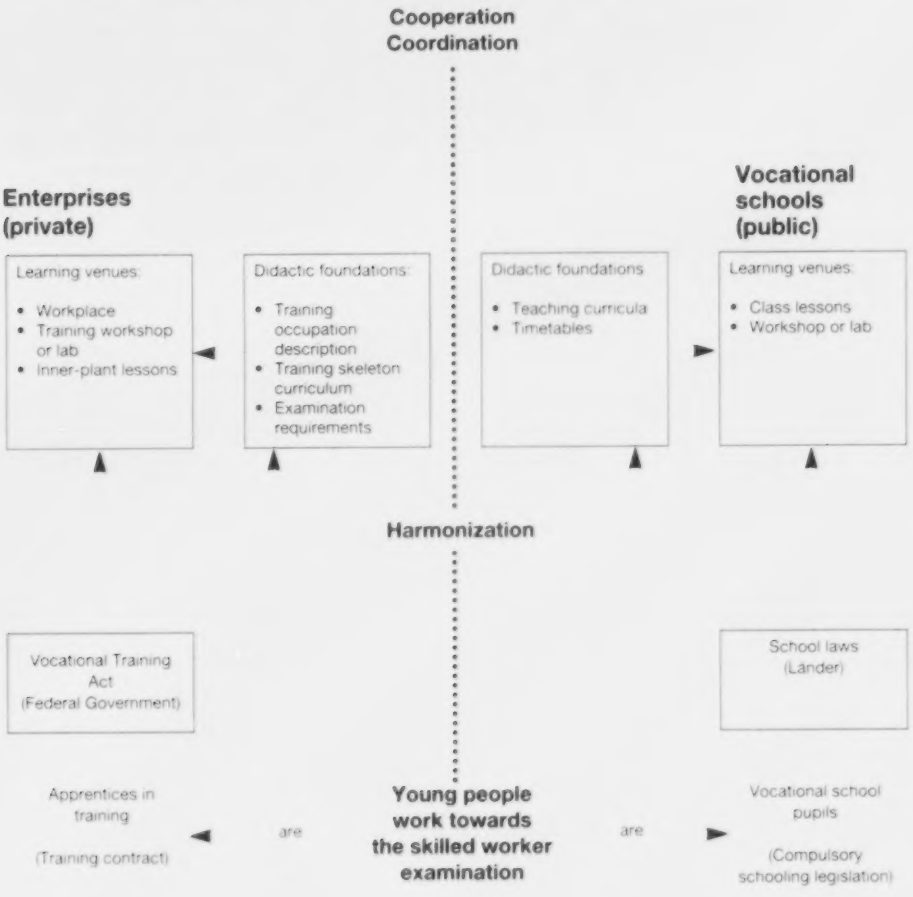
3.2. The dual system

Basic structure and significance

3.2.1.
The characteristic feature of initial training in the dual system is the cooperation between two totally different providers of training, namely (predominantly) private enterprises on the one hand and public vocational schools on the other. In this way, from the angle of learning and learning location, it combines learning on the job in the real situation (functional field) and learning in the protective environment of the vocational school (learning field).

While the state as the provider of vocational schools is directly involved in vocational training in this area, it nevertheless exerts an indirect influence on vocational training in the enterprises by establishing framework conditions and laying down regulations (Vocational Training Act). In the further sense, the dual system represents a state-controlled model of vocational training. As shown above, this model has developed historically. Its current legal institutional form stems primarily from the Vocational Training Act of 14 August 1969.

Structural features of the dual system



Source: Münch, J.: Vocational training in the Federal Republic of Germany. CEDEFOP. 3rd edition, p. 48

The figure identifies the following structural features of the dual system:

- Private enterprises cooperate with public vocational schools.
- Training in enterprises is uniformly regulated throughout the Federal Republic by the Vocational Training Act of 14 August 1969 and the respective regulations.
- Vocational school instruction is subject to the school laws of the *Länder* whose cultural and educational autonomy gives them the responsibility for all schools, including vocational schools.
- In view of the constitutional dualism – federal competence for vocational training in enterprises versus *Länder* competence for vocational schools – the didactic foundations in enterprises and vocational schools must be brought into accord and the training activities of both these training providers must be coordinated.

- Seen from the educational and learning venue aspects, the 'dual' system is a pluralistic system. Not always, but in most cases, the principle of plurality of learning venues dominates.

- A young person undergoing vocational training is both a trainee (apprentice) and a vocational school pupil. His status as a trainee is based on an agreement, the training contract, governed by private law. His status as a vocational school pupil is based on the compulsory education laws of the *Länder*.

The broad acceptance of the dual system is (also) founded on certain traditional attitudes rooted in history such as:

- parents enquire as a matter of course about dual system training for their children who are completing school (unless a course of study at an establishment of higher education seems to be the better alternative for those who have the university entrance certificate);

- it is a matter of course that not all but nevertheless a large number of enterprises offer training places, and finally;

- it is a matter of course that young people undergo training in the dual system.

In 1990, 583 000 new training contracts were concluded and a total of 1 476 900 young people were undergoing training in the dual system. In contrast to this, about 278 200 students started their studies at an establishment of higher education. In 1990 there was a total of 1 585 200 higher education students in the Federal Republic of Germany, that means over 100 000 more students than trainees.

One year before, for the first time ever in the history of the Federal Republic of Germany, the number of students exceeded the number of trainees. A comparison of the total number of trainees with the total number of students is misleading, however, because university education takes twice as long in practice as vocational training under the dual system which generally takes three years. A comparison of the numbers of new enrolments at establishments of higher education and in the dual system demonstrates just what numerical significance the dual system still has in the Federal Republic of Germany, despite the constant increase in the number of students. In 1990, 74.8% of the population aged between 16 and 19 were trainees (Grund- und Strukturdaten, 1991/92, p. 106).

Joint efforts of the Federal Government, the *Länder* and the economy have had the effect that today more than 90% of average school-leavers are trained in enterprises, schools and establishments of higher education (Federal Ministry of Education and Science: Berufsbildungsbericht 1990, p. 113).

The following table gives an overview of trends in the numbers of trainees in selected years since 1960.

Numbers of trainees in selected years

	Trainees Total number	Female trainees absolute	as %
1960	1 265 900	454 700	35.9
1970	1 268 700	447 400	35.3
1980	1 715 500	655 000	38.2
1985	1 831 300	743 800	40.6
1990	1 476 900	629 800	42.6

Source: Federal Ministry of Education and Science, *Grund- und Strukturdaten*, 1991/92, pp. 106 f.

The next table demonstrates the fact that apprenticeship training is common in all sectors of the economy, even in the civil service and the liberal professions.

Trainees according to economic sectors

Training sector	Number	Percentage
Industry and Commerce	756 400	51.2
Craft trades	468 900	33.0
Agriculture	29 700	2.0
Civil service	63 400	4.3
Liberal professions	130 300	8.8
Home economics	9 700	0.7
Shipping	400	0.0

Source: Federal Ministry of Education and Science, *Grund- und Strukturdaten*, 1991/92, p. 112

Legal aspects of the dual system

3.2.2.
Legal foundations for on-the-job vocational training

3.2.2.1.
As already mentioned, the responsibility for vocational training in enterprises rests with the Federal Government and consequently, the foundation for regulating this area of vocational training is the Vocational Training Act of 14 August 1969, a federal law. It is the most important legal foundation for training apprentices in enterprises. For vocational training in the craft trades, however, the Crafts Code in the version of 28 December 1965 and amended by the Vocational Training Act of 14 August 1969 also applies.

The scope of the Vocational Training Act covers not only initial vocational training but also further vocational training and retraining. The Act covers initial vocational training (training of apprentices) 'in so far as it is not carried out in vocational schools, where the school laws of the *Länder* apply' (Vocational Training Act). The Vocational Training Act legally entitles enterprises in particular to conduct, direct and assume responsibility for vocational training under observance of the legal framework provisions. The prerequisites and framework provisions include,

for example, the personal aptitude and technical competence of instructors or trainers commissioned by them, the suitability of the training place and compliance with the training regulations.

Enterprises are entitled, but not obliged, to provide vocational training. By the end of 1990, 470 000, i.e. 18.8%, of the 2 500 000 enterprises located in the old federal *Länder* (including the civil service and the liberal professions) exercised their right to provide vocational training. In the craft trades this percentage was 36.0%.

The Vocational Training Act regulates in particular:

- the vocational training 'relationship';
- the regulation of vocational training, and particularly the recognition of training occupations;
- examinations;
- the arrangement and supervision of vocational training;
- further training and retraining;
- the composition and duties of the committees.

The Youth Employment Protection Law of 9 August 1960, as amended on 12 April 1976, states in addition to special protective regulations pertaining to trainees and other young workers (for example regulations governing working time) that the employer is obliged to grant the young employee the time necessary for compulsory school attendance. Attendance at a vocational school may not result in any loss of pay for the apprentice.

The Industrial Constitution Law of 15 January 1972 covers on-the-job training (thus including apprenticeship training) and deals with the participation rights of the works council and the youth delegation in promoting and implementing incompany training measures.

Legal foundations for the vocational schools

3.2.2.2.
The competence of the *Länder* includes responsibility for schools and, therefore, for vocational schools. This means that each *Land* has its own school and compulsory education laws which include those for vocational schools. In order to avoid gaping disparities, the Standing Conference of *Land* Ministers of Education and Cultural Affairs ensure through their decisions that a certain degree of uniformity is maintained in education. These decisions represent recommendations which the Ministers of Education and Cultural Affairs make to their *Länder*. The implementation of these recommendations is the exclusive responsibility of the governments of the *Länder*, i.e. of the individual Ministers of Education and Cultural Affairs and, if necessary, of the *Länder* parliaments.

Despite the efforts of the Standing Conference of *Land* Ministers of Education and Cultural Affairs, differences in vocational schools do exist in the various *Länder* with regard to the number of hours per week, the subjects and names of subjects, certificates and even, curricula. This presented some disadvantages in the past since the training regulations governing vocational training in enterprises, which are based on the Vocational Training Act, are uniform

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throughout the Federal Republic. This discrepancy was also the reason why on 8 August 1974 a coordinating committee of the Federal Government and the *Länder* adopted the 'Procedure for the harmonization of training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972.'

As we have already illustrated, the dual system of vocational training in the Federal Republic of Germany is a very complicated system in terms of its legal aspects. The reasons for this are:

- the federal system of the Federal Republic of Germany;
- the differing areas of competence of the Federal Government and the *Länder* in the field of vocational training;
- the relatively tight network of regulations and controls;
- the combination of state responsibility for initial vocational training and the principle of autonomy, and
- the fact that the dual system is embedded both in the public education system (vocational schools) and in a market economy with private enterprises.

The educational aspects of the dual system

3.2.3.
Strictly speaking, the common and generally accepted term 'dual' system in Germany only covers the constitutional aspect, namely the duality of competences: that of the Federal Government for vocational training in enterprises and that of the *Länder* for vocational schools. From the angle of the learning venues and vocational education, however, the dual system is not a dual but a plural system. Neither the vocational schools nor the enterprises are standardized venues; they provide training at quite different learning sites.

As studies have shown (Münch et al, 1981), the dual system is extremely diverse with regard to the various learning venues it employs and the combination thereof. In this connection, we should bear in mind that the training regulations stipulate the duration of training, the learning objectives and contents as well as examination requirements for the respective occupations but they do not specify the scope or order of learning venues to be used. As a matter of fact, each enterprise uses its own combination of learning venues. However, the combinations of learning sites in larger enterprises are more varied than in smaller enterprises. Training workshops and in-house instruction as learning venues play a greater role in larger enterprises due to their more pronounced division of labour. Whereas for decades there had been a tendency to separate training in enterprises from the actual working process, thereby reducing the significance of learning on the job, we can now observe a reverse trend in the sense of more integrated teamwork due to the influence of new technologies and new organizational forms of work.

If training enterprises are not able to run in-house training workshops because for example they have too few apprentices, they frequently use external training centres. This applies in particular to vocational training in the craft trades because for one, the majority of small craft enterprises are not able to run their own training workshops, and secondly, because within the craft trades the learning venue 'training workshop' is seen as an essential supplement to the

learning venue 'workplace'. The goal set by the Education Planning and Research Promotion Commission of the Federal Government and the *Länder* to create 77 100 workshop places in external vocational training facilities has almost been reached. A large number of external vocational training centres also provide continuing training. In 1984, 43% of such training centres did so (Beicht et al, 1987, p. 70).

A survey carried out by the Federal Institute for Vocational Training (*Berufsbildungsbericht* 1989, pp. 106 ff.) in 1987 shows the variety of learning venues used in on-the-job training. According to the survey, training enterprises in the areas covered by the Chambers of Industry and Commerce and the Chambers of Handicrafts used the following learning venues in addition to the workplace (ibid, p. 107):

- 35% of training enterprises make use of external facilities during the training of their apprentices (62% of craft enterprises and 18% of the enterprises which are members of the Chambers of Industry and Commerce);
- 27% of these enterprises provide additional inhouse instruction (38% of the enterprises which are members of the Chambers of Industry and Commerce and 8% of craft enterprises);
- 15% send their trainees to external courses (18% of the enterprises which are members of the Chambers of Industry and Commerce and 11% of craft enterprises);
- 13% make use of training workshops/training corners/simulated offices, etc. (14% of the enterprises which are members of the Chambers of Industry and Commerce and 11% of craft enterprises);
- 7% organize a training association or cooperate in some other form in training (9% of the enterprises which are members of the Chambers of Industry and Commerce and 2% of craft enterprises).

The target group of the dual system

3.2.4.

The dual system as an 'open' training system

3.2.4.1.

The dual system is an 'open' training system with no formal individual restrictions on admission such as age, educational level, nationality or sex. For parents and children it is the most natural thing in the world to look for a training place within the dual system even before a child has left school. This means that, as a rule, young people commence vocational training immediately after completing their general education. Consequently, it is young people who acquire the status of apprentice (trainee) and become pupils at a vocational school. 30 years ago, apprentices were very young because compulsory education lasted only eight years and only a small percentage of boys and girls attended secondary schools. Today the average age of an applicant for a training place is 17. 30 years ago, the typical apprentice only had primary schooling or today's equivalent of lower secondary schooling. These days apprentices with intermediate secondary schooling or university entrance qualifications outnumber those who have only completed their lower secondary schooling.

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In 1990, 44.5% of the pupils at vocational schools had lower secondary schooling; of these 38.4% had gained the final lower secondary examination certificate and 6.1% had left school without it. 41.7% had completed intermediate secondary school, 10.6% had obtained university entrance qualifications and 3.2% had a certificate of aptitude for specialized short-course higher education (*Grund- und Strukturdaten 1991/92*, p. 71). Of a total of 1 476 900 apprentices in 1990, more than 200 000 had university entrance qualifications. Most apprentices with university entrance qualifications tend to take up studies at an establishment of higher education once they have passed their final examinations as skilled workers.

It has already been pointed out that, in a formal legal sense, no specific school education is required for entrance into training within the dual system. Certain differences have emerged, however, based on prestige and different requirements. For example, apprentices with an intermediate secondary school certificate or university entrance qualifications are more likely to be found in the training occupations of bank clerk and industrial clerk, while in certain craft trades lower secondary school-leavers tend to dominate. When the demand for training places is high (for example in baby boom years) and training places are correspondingly scarce, enterprises tend to demand higher school qualifications from their applicants. Enterprises with less attractive and less prestigious occupations are then forced to lower their requirements. In other words, the player with the best cards wins. A number of craft trade occupations such as the building trade and the food industry and also the catering trade suffer particularly from this phenomenon. In years when there is no lack of training places, these branches have trouble recruiting any trainees at all. Thus, in 1990 about 113 900 training places, above all in the craft trades, could not be filled.

Girls in vocational training

3.2.4.2.
Although the overall percentage of female trainees has increased over the past three decades – their share grew from 35.9% in 1960 to 42.6% in 1990 – they are still significantly under-represented. This is above all a result of the traditional concentration of the majority of girls and women within a relatively narrow spectrum of training occupations and jobs. Various attempts have been made to change the behaviour of young women choosing an occupation and to alter the recruitment practices of enterprises. We shall mention only two of them here. In 1986, the Federal Ministry of Education and Science initiated a series of projects on 'Training and careers for women in technology-oriented occupations' and in August 1989, the same ministry began a four-year information campaign intended to break down prejudices inhibiting girls and young women from entering commercial-technical occupations.

In principle, nearly all training occupations in the dual system (with the exception of mining and civil engineering) are open to both males and females. However there are preferences, mainly traditional ones, not only on the part of those seeking training places but also on the part of suppliers, i.e. the enterprises. The two following tables demonstrate this:

Male trainees in the five training occupations most popular among males in order of popularity (1990)

Training occupation	Number of trainees male	overall
Motor-vehicle mechanic	63 297	64 293
Electrician	44 480	44 912
Wholesale and foreign trade clerk	27 801	48 417
Industrial mechanic, specialization: machine and technology systems	27 738	28 526
Industrial mechanic, specialization: service systems	27 715	28 430

Source: Federal Ministry of Education and Science, Grund- und Strukturdaten, 1991/92, p. 114

Female trainees in the five training occupations most popular among females in order of popularity (1990)

Training occupation	Number of trainees female	overall
Hairdresser	46 171	48 984
Clerk, retail trade	44 328	68 233
Office clerk	42 316	52 254
Doctor's assistant	41 925	41 975
Industrial clerk	39 175	63 216

Source: Federal Ministry of Education and Science, Grund- und Strukturdaten, 1991/92, p. 115

Young foreigners in vocational training

3.2.4.3.
The percentage of young foreigners taking part in vocational training in the dual system is on the rise. In 1990, 98 239 young foreigners were undergoing vocational training. This was 6.65% of the total number of trainees. If we look at the total number of young foreigners aged between 15 and 18 – 257 900 in 1989 – we notice that the percentage of untrained young people is much higher than among young Germans, 10% of whom enter the workforce without training.

For demographic reasons it is to be expected that the number of young foreigners applying for training places will increase over the next few years. At the same time, with fewer young Germans applying for training places, we can expect enterprises to change their supply and selection attitudes, giving more young foreigners a proper chance of obtaining training places. As the highest rate of increase in the number of foreign trainees is currently in the craft trades, it is to be expected that the craft trades will continue to have the highest growth rates when it comes to training places for young foreigners. Overall, the chances of young foreigners obtaining training places in enterprises will probably continue to rise. Pilot projects (*Berufsbildungsbericht* 1989, pp. 116 ff.), have shown,

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however, that many young foreigners need additional assistance in order to be able to complete their training successfully.

The starting point of vocational training policy for young foreigners can be described as follows:

- young foreigners represent a numerically strong group among young people and a group that continues to grow in size;
- young foreigners are a very heterogeneous group, with varying degrees of socio-cultural difference from the host country and varying deficits in education and training;
- the vast majority of young foreigners are still underprivileged in the German education and training system;
- for various reasons, the majority of young foreigners do not take advantage of existing educational and training opportunities, or they are not aware of what is being offered;
- the vast majority of young foreign workers between the ages of 14 and 25 are employed in unskilled or semi-skilled jobs.

Training drop-outs

3.2.4.4.
The 'drop-out' phenomenon exists in the dual system just as in other educational and training courses. At the present time, almost one in every four newly concluded training contracts is dissolved during the probationary period. In 1990, about 25% of training contracts were cancelled during the one- to three-month trial period. Statistics are available for the old federal *Länder* on the whereabouts of young people who dropped out of training in 1991 before completing it (*Berufsbildungsbericht* 1992, pp. 36 ff.). 46% of the drop-outs concluded a new contract, 19% were trying to obtain a new contract and 33% did not intend to begin another apprenticeship. The reasons that lead to the cancellation of contracts are quite diverse and cannot be covered here. In many instances, contracts are cancelled because trainees rethink their occupational orientation, so in these (majority of) cases the term 'drop-out' must be qualified.

Teaching personnel in the dual system

3.2.5.
Vocational school teachers

3.2.5.1.
A characteristic feature of teaching personnel in the dual system in Germany is the clear-cut distinction between trainers in enterprises and vocational school teachers. It is important to remember in this respect that trainers work in private enterprises or (to a lesser extent) in external training workshops or training centres and that teachers work in public schools, namely in vocational schools. This results in marked differences in their roles, status, training and work.

A vocational school teacher working in the one part of the dual system has the same status as any other teacher in the public school system who, generally speaking, is employed as a civil servant for life. Their training as well as their career development are determined by training and career guidelines of the state. Apart from minor differences, training, career, tasks and salary are uniformly regulated on the whole. In contrast to trainers, vocational school teachers form a homogeneous group. The image they have of themselves originates from their position as a teacher at a public school and their labour legislation situation as a civil servant. Vocational school teachers, or to be more precise, teachers at vocational training schools are trained at universities or equivalent establishments of higher education (universities of technology/higher education institutions, comprehensive universities). Thus they are not only qualified to teach at vocational schools, but also at other vocational training schools. The university curricula vary, among other reasons, due to the cultural autonomy of each *Land*. Nevertheless, a basic pattern can generally be observed throughout all *Länder*. In principle, courses last from eight to ten semesters just as most other courses at universities, but in practice, most students take two to four extra semesters. University entrance qualifications as well as specialized practical training in relevant enterprises lasting at least 12 months are the prerequisites for admission to such a course of study.

Teacher training which qualifies teachers to instruct subject-related theory and general education courses within the specialization of vocational training includes:

- studies in education;
- as a rule, in-depth studies in one of the specific subject areas of vocational training;
- studies in a mainly general education subject and
- practical work lasting several weeks at a vocational training school and occasionally, additional practical work in the social fields.

At the end of the course, students have to pass the first state examination for secondary school teachers. The title of this differs according to Land laws (for example secondary school teacher for vocational subjects for stage II secondary education or for vocational schools). As the individual *Länder* each have their own regulations, a diploma examination can sometimes replace the first state examination in certain specialized areas. The state examination, or in some

cases the diploma examination, is followed by a two-year preparatory teaching period that includes practical studies in a so-called study seminar and practical experience at a training school. Students complete their studies by passing the second state examination. This is the prerequisite for employment at a vocational training school but it does not guarantee them a position. This examination has to be passed in the presence of a state examination board or a state examination commission. Generally the examination consists of four parts:

- a written thesis in the area of education, educational psychology, or in didactics in one of the teaching subjects;
- an examination of practical teaching including trial lessons in selected subjects;
- an examination on the foundations of education, school and civil servant law, school administration and, if applicable, the sociological aspects of education and
- an examination on the didactic and methodological issues of the teaching subjects.

Vocational school teachers generally teach the theory of the occupation(s) that lies in their area of expertise, and technology, technical calculations and technical drawing in technical occupations, or business economics, administration, commercial calculations, etc. in administrative and commercial occupations. The high academic level of teacher training for teachers in vocational training schools is an essential prerequisite for teaching aimed at dealing to the highest degree possible with state-of-the-art technology. There is some criticism, especially from the craft trades sector, that teachers lack practical experience.

While in 1990 there were about 37 000 vocational school teachers in the Federal Republic, the number of trainers was, of course, considerably higher. This is due to the fact that not all trainers work full-time in a training capacity; the majority work part-time as trainers in addition to carrying out other functions. Moreover, the ratio of trainers to trainees is much higher in enterprises than in vocational schools. In 1990 there was one teacher for every 42.3 pupils. However, this figure does not reflect the actual number of pupils per teachers accurately since this is based on the size of the class which can vary between 15 and 30 pupils depending on the location, vocational school and occupation. Compared with the teacher-pupil ratio, in 1989 one trainer was responsible for two to three trainees on average (*Berufsbildungsbericht* 1991, p. 140).

The trainer-trainee ratio varies a great deal depending on the sector and size of the training enterprise. In 1989 a total of 669 000 persons possessing the necessary personal and specialized qualifications were registered with the competent bodies as trainers in the areas of industry and commerce, the craft trades, the civil service, agriculture, the liberal professions, home economics and shipping. 94% of trainers train part-time as part of their functions in the production or service sectors (*Berufsbildungsbericht* 1991, p. 140). This means that in 1989 there were about 40 000 full-time trainers. The vast majority of these trainers carry out their duties in in-house training workshops, training laboratories, simulated offices, etc. or in external training centres.

Trainers in enterprises

3.2.5.2.
In contrast to teachers at vocational schools and other vocational training schools, there is no fixed career pattern among trainers since the job of a trainer, even of a full-time trainer, is not a traditional occupation. As a rule trainers are first skilled workers, foremen, technicians, engineers or commercial clerks, i.e. experts with several years of professional experience before they begin to work as trainers or training officers. They acquire the special occupational and educational qualifications in the daily practice of their training duties and/or through continuing training. This rather unsatisfactory situation has been somewhat improved in Germany through the fact that trainers have to pass an examination testing their occupational and educational qualifications as stipulated in the Trainer Aptitude Regulation issued in 1972. The Trainer Aptitude Regulation lays down the skills and knowledge to be demonstrated in an examination. These skills and knowledge can be acquired in courses offered mainly by the chambers. These courses generally entail 120 45-minute lessons. The master craftsman's examination, and in more recent times the examinations to become an industrial master craftsman too, include this so-called occupational and education section. It is a matter of dispute whether the present regulation and practice of taking such an examination under the Trainer Aptitude Regulation still meet the demands made on trainers today and will meet them in the future. While employers tend to think that the present regulation suffices, the trade unions and a great number of trainers themselves tend to regard it as lacking. The trainers point out that they not only have to cope with changed demands but with increased demands as well. The most important reasons for this development are:

- changes in work organization which move away from production processes based on the division of labour toward more integrated work;
- changes in work demands brought on by new technologies and the need for teamwork;
- changes in training objectives and contents with special emphasis being placed on practical competence (instead of teaching isolated knowledge and skills);
- changes in the requirements and expectations of apprentices (generally a higher level of education, older, looking for more meaning, creativity and responsibility);
- changes in the realm of duties (assuming continuing training functions);
- changes in the trainer's role from that of an instructor to someone who advises and 'chairs' training.

On the initiative of the employees' representatives, the Board of the Federal Institute for Vocational Training took the unanimous decision in February 1990 to update the skeleton curricula for the training of trainers. A statutory regulation has still not been passed in this matter, however. This does not mean that anyone in Germany is seriously considering qualifying trainers within the framework of a regular course of study. This would not be possible for part-time trainers, who account for the majority and it would not be sensible for full-time trainers. The primary qualification for working as a trainer in the future as well will be specialized qualifications in a trainer's original occupation and many years professional experience at the job.

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3.2.6.
Training regulations as the didactic foundations of training in enterprises

3.2.6.1.
Vocational training within the dual system provides training in so-called recognized training occupations (see § 25 of the Vocational Training Act). § 28 of the Vocational Training Act stipulates that training in a recognized training occupation should proceed only in accordance with the relevant training regulation. There are training regulations for all the 377 recognized training occupations (1991). The Federal Government is responsible for enacting these training regulations. The aspects to be included in the structure and contents of training regulations are laid down in § 25, paragraph 2 of the Vocational Training Act. Accordingly, a training regulation must specify at least:

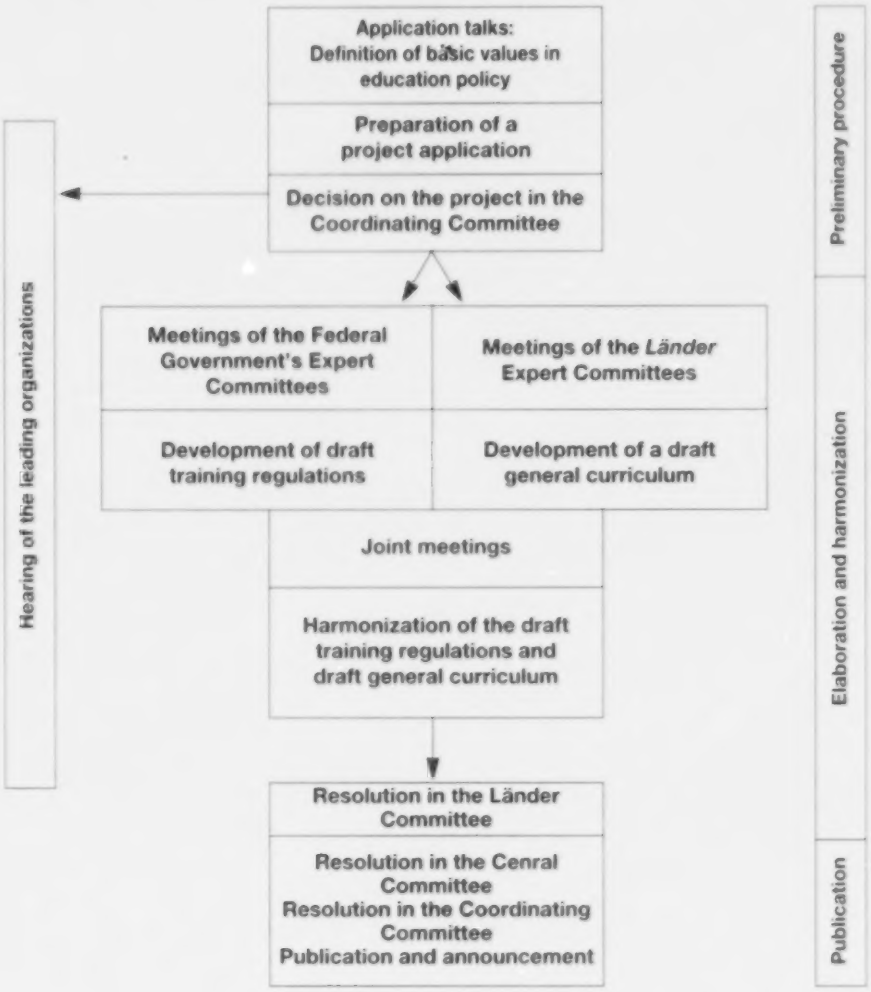
- the title of the training occupation;
- the period of training;
- the skills and knowledge to be imparted during the course of training (description of training occupation);
- an outline of the syllabus and the timetable to be followed for the purpose of imparting the relevant skills and knowledge (skeleton curriculum);
- the examinations requirements for the final examination.

The most important parts of every training regulation are:

- the description of the training occupation;
- the skeleton curriculum;
- the examination requirements.

The description of the training occupation specifies (usually in a brief form) the knowledge, skills and abilities to be demanded in the named, state-recognized occupation (e.g. motor vehicle electrician). The skeleton curriculum is the most extensive part of a training regulation. It lays down what parts of the description, i.e. what skills, knowledge and abilities, have to be imparted during a certain period of time and in what sequence this has to be done. The examination requirements both for the intermediate examination and the final examination include concrete data on the subject and areas to be tested as well as specific subject-related assessment criteria for weighting the individual examination results. In accordance with § 25, paragraph 2 of the Vocational Training Act, training should not normally last longer than three years or less than two. The new training regulations for the industrial metalworking and electrical occupations, which came into force on 1 August 1987, as well as the new training regulations for the electrical trade occupations (1988) and the metalworking trade occupations (1989) stipulate the length of training as three and a half years. Occupations such as those of scaffolder and photographic laboratory assistant require a two-year training period.

Procedure for the conception and harmonization of training regulations and general curricula


Application talks:
Definition of basic values in education policy
Preparation of a project application
Decision on the project in the Coordinating Committee
Hearing of the leading organizations
Meetings of the Federal Government's Expert Committees
Meetings of the Länder Expert Committees
Development of draft training regulations
Development of a draft general curriculum
Joint meetings
Harmonization of the draft training regulations and draft general curriculum
Resolution in the Länder Committee
Resolution in the Cenral Committee
Resolution in the Coordinating Committee
Publication and announcement
Preliminary procedure
Elaboration and harmonization
Publication

Source: Federal Ministery of Education and Science, Vocational Training in the dual system, 1991, p. 17

The normal period of training for all training relationships as established in the training regulations averaged 35.6 months in 1987 (*Berufsbildungsbericht 1989*, p. 90). According to § 29, paragraph 2 of the Vocational Training Act, a trainee may apply to have the training period reduced.

In 1950, 901 training occupations existed; today there are only 377 (1991) and we may assume that the number will continue to decrease. This development has not come about by chance. It is a process of concentration reflecting an intended development in vocational training policy and vocational education. A great number of training regulations and training occupations were dropped since they had become outdated through technological and economic changes in the modern world of work. When updating the existing training regulations

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and developing new ones, it was important to ensure both a high degree of specialized competence in the sense of qualifications relevant on the labour-market and a maximum amount of occupational mobility and flexibility. This led to a reduction in the number of training occupations and a revision of the qualifications themselves in the sense of providing broad basic qualifications and graded specialization – with focal areas and specialized subjects. Consequently, the training regulation for the industrial metalworking occupations of 15 January 1987, for example, cut the previous 38 training occupations down to 17. The basic concept of the new training regulations is also illustrated by the example of the metalworking trades.

Thus, the training occupation 'construction metal worker' with its five areas of specializations, i.e. construction technology, plant engineering and materials-handling technology, metalworking, agricultural engineering and vehicle construction, replaced the traditional trades of smith and fitter which no longer meet today's demands. The concept of specializations and (in other occupations such as mechanical engineering operative) focal points combines a broad basic qualification with a degree of specialization which complies with the interests and possibilities of the enterprise and the needs of the future craftsman. He should not only be specialized but mobile and flexible as well.

The didactic foundations for teaching in vocational schools

3.2.6.2.
In the dual system the vocational school is the partner of the enterprises. It differs from all other vocational training schools in three aspects in particular:

- it is a compulsory school;
- it is a part-time school;
- as a public (state) school, it has a purpose which it carries out jointly with enterprises.

In the Decision of the Standing Conference of the Ministers of Education and Cultural Affairs dated 8 December 1975 (*Designations for Structuring Vocational Schools*), the second feature is emphasized in that vocational schools are set the task of 'teaching pupils general and specialized subject matter while paying special attention to the requirements of vocational training'. Furthermore: 'Instruction is to be (...) closely related to the training in enterprises, including external training centres'. The basic agreement on vocational schools (Decision of the Standing Conference of the Ministers of Education and Cultural Affairs of 14/15 March 1991) states that: 'In the dual system of vocational training, vocational schools and training enterprises fulfil a joint educational mission'.

Thus, vocational training within the dual system is the decisive (though not necessarily the exclusive) reference point for the subjects and curricula at vocational schools. This applies unreservedly to those subjects and curricula intended to impart the theoretical foundations of the respective training occupation. In accordance with the cultural and educational autonomy of the *Länder*, the preparation and implementation of curricula for vocational schools is a matter for the *Länder* and this results in differences, at times quite marked differences, which affect both the procedure for drawing up curricula and their contents.

In connection with the function of vocational schools within the framework of the dual system, an essential question arises as to whether the curricula also vary in content from *Land* to *Land*. We should bear in mind that the didactic foundations for vocational training in enterprises are uniform throughout the Federal Republic. Basically, the *Länder* have the freedom to decide upon the contents of the curricula. This also applies, therefore, to the learning contents of those subjects at vocational schools which directly contribute to the vocational qualification process.

This leads to the problem of harmonizing the training regulations, especially the skeleton training curricula (for on-the-job training), and the skeleton curricula (for what is taught at vocational schools). A solution to this problem was found in the early 1970s. On 8 August 1974, after protracted deliberations, a 'Procedure to harmonize training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972' was adopted (see diagram on p. 50).

Examinations in the dual system

3.2.7.
On the basis of the Vocational Training Act and the relevant examination regulations, the following examinations are conducted:

- the intermediate examination;
- the final examination;
- the master craftsman's examination;
- the further training examination.

Whereas the intermediate examinations and the final examinations are uniformly regulated throughout the Federal Republic, this holds true only in part for the master craftsman's examination and the further training examination.

§ 42 of the Vocational Training Act and § 39 of the Crafts Code state that trainees must sit 'at least one intermediate examination in accordance with the training regulation' during the course of training to establish their level of training. As with the final examination, the competent bodies, i.e. primarily the chambers, are responsible for conducting the intermediate examination. Upon completion of the intermediate examination, a certificate is issued stating what level the trainee has reached. If this level is low it may not necessarily be the trainee's fault, it might be the enterprise's. Thus, the intermediate examination gives the competent bodies the opportunity to intervene in time.

§§ 34–41 of the Vocational Training Act provide the legal basis for holding, drawing up and administering final examinations. Final examinations have to be conducted in all recognized training occupations (§ 34). Trainees are not obliged to take this examination but in practice, however, the majority of trainees do so. The final examination is free of charge. In 1989, about 676 000 trainees took the final examination and the success rate was 89%. In the craft trades, just under 16% did not pass the examination. The competent bodies are responsible for drawing up and administering the final examinations. Pursuant to § 34 of the Vocational Training Act, they (the Chambers of Industry and Commerce, the Chambers of Handicrafts, the Agricultural Chambers, etc.) have not only the right but also the obligation to conduct final examinations in recognized training occupations. For this purpose they issue examination regulations. The examining boards are likewise set up by the competent bodies (§ 36, Vocational Training Act) and consist of at least three members. An examining board must contain an equal number of representatives of the employers and the employees along with at least one vocational school teacher (§ 37, para. 2, Vocational Training Act).

The examination requirements form part of the training regulations issued for each training occupation (§ 25, Vocational Training Act). They lay down the special requirements for each individual occupation and until recently were formulated to include nothing but knowledge and skills. The new training regulations, for example for the industrial metalworking and electrical occupations of 1 August 1989, contain a new description of qualifications which explicitly should be tested in the examinations as well:

the knowledge and skills have to be taught in such a way as to enable the trainee to carry out skilled occupational activities which include in particular independent planning, execution and control of his own work. These abilities have to be proven in an examination.

Testing this practical competence is scarcely possible in the usual examination procedures. These new requirements aiming at practical occupational competence pose problems for the design of practical examinations, which have still not been solved.

Under the Vocational Training Act, involvement of vocational schools in the legal-institutional sense is restricted to the presence of vocational school teachers on the examining boards. In practice, however, the extent and form in which vocational schools are involved in conducting final examinations varies widely according to the competent body, the *Land*, etc. Teachers at vocational schools tend to assess their role and involvement in final examination as unsatisfactory.

Master craftsman's examinations are conducted in the craft trades, agriculture, home economics and in industrial trades as well. Prerequisites for admission to the master craftsman's examinations are, as a rule, a pass in the final examination in a relevant training occupation and several years relevant professional experience (depending on the type of master craftsman's examination). The necessary knowledge can be acquired in special courses or at schools (for example master craftsmen's schools). Once a tradesman has passed the master craftsman's examination, he is entitled to train apprentices and (in the craft trades) to open and manage a craft trade enterprise.

Under § 46 of the Vocational Training Act, the competent bodies are entitled to conduct further training examinations to gain proof of knowledge, skills and experience acquired in further vocational training. The regulations for further training examinations are issued by the competent bodies (chambers) or by the Federal Government for the entire Federal Republic. The 87 Chambers of Industry and Commerce alone had 1 279 further training regulations in 1991 with the relevant further training examinations to cover a wide range of occupations (banking specialist, commercial specialist, insurance specialist, etc.).

Success in further training examinations helps to consolidate a skilled worker's career or prepare him or her to climb higher up the career ladder. For this reason more and more people who have passed through the dual system are taking further training examinations.

3.3. Vocational training in schools

Full-time specialized vocational schools for vocational training

3.3.1.
As the main providers of full-time vocational training, full-time specialized vocational schools go under a multitude of names, run courses of varying duration and issue a wide range of different certificates. According to the Decision of the Conference of the Ministers of Education and Cultural Affairs of 8 December 1975 – Designations for Structuring Vocational Schools –, they are:

schools which provide full-time instruction lasting at least one year and which do not require vocational training or occupational experience as a prerequisite for admission. Their task is to teach general and specialized subjects and to enable pupils to acquire qualifications in a recognized training occupation, or in one part of vocational training for one or more such occupations, or a vocational qualification which can be gained only at school.

There are basically three types of full-time specialized vocational schools:

- those at which attendance counts towards the training period in a recognized training occupation. These full-time specialized vocational schools do not award a qualifying certificate at skilled-worker level. They generally provide basic vocational training orientated toward an occupational field. The majority of pupils who attend these full-time specialized vocational schools continue their training within the dual system. Their attendance at this school is credited towards their training in a recognized training occupation on the basis of the credit of pre-vocational year regulation;

- full-time specialized vocational schools which qualify pupils in a recognized training occupation. The course generally takes three years. Although these schools are in direct 'competition' with the corresponding training courses within the dual system, there are too few of them to play a major role;

- full-time specialized vocational schools at which pupils acquire a vocational qualification that can only be gained by attending a school. To a certain extent, these full-time specialized vocational schools fill qualification 'gaps' left by the dual system with its recognized training occupations. They provide qualifications which are difficult or nearly impossible to impart within the dual system.

The latter two types are, as a rule, three-year schools while the first type is a two-year or (in rare cases) a one-year school. Most full-time specialized vocational schools require the lower secondary school final certificate for admission. Others only admit pupils holding the intermediate secondary school final certificate (gained after 10 years regular schooling). Some full-time specialized vocational schools that build upon the lower secondary school leaving certificate also award an intermediate secondary school certificate at the end of the courses.

The statistics available on the numbers of pupils at full-time specialized vocational schools pose a problem since they do not differentiate between the abovementioned types of full-time specialized vocational schools. This also holds true for the data (Grund- und Strukturdaten) of the Federal Ministry of Education and Science. According to their figures (1991/92), a total of 245 600 pupils attended full-time specialized vocational schools in 1990; 157 200 of these pupils were girls. In 1983, the full-time specialized vocational schools had – with 356 300 pupils – their highest level of enrolment. The Conference of the Ministers of Education and Cultural Affairs predicts a further decline in the number of pupils at these schools. The vast majority of pupils attend a full-time specialized vocational school at which attendance counts towards the training period in a recognized training occupation. These are mainly full-time specialized vocational schools of the commercial-administrative variety (known as commercial schools) and those providing training for home economics and social welfare occupations. Since the majority of pupils at these schools are girls, there are significantly more girls than boys at full-time specialized vocational schools overall. Most of the pupils attending one- to two-year full-time specialized vocational training courses do not regard full-time training at a specialized vocational school as a real alternative to training within the dual system. Instead they see the full-time specialized vocational school as a place to continue their general education and acquire basic vocational training for a broad field of training occupations. This is then supplemented by specialized training within the dual system to qualify them as skilled workers. The temporary peak in the number of pupils attending full-time specialized vocational schools was also caused by a shortage of training places within the dual system. A small number of pupils went to a full-time specialized vocational school while they were 'waiting' to get into the dual system.

No recent data is available on the number of pupils at public and private full-time specialized vocational schools which qualify pupils for an occupation, be it in a recognized training occupation within the dual system or in another occupation (learnt exclusively at a school). In 1985, the figure lay around 65 000 pupils and in 1992 the number might well have been fewer than 50 000.

Compared with the total number of pupils at full-time specialized vocational schools, the number of pupils attending this particular type of specialized vocational school is relatively low. With the more than adequate supply of training places within the dual system at present, a decline can be expected in the number of pupils attending full-time specialized vocational schools, especially ones that offer training in occupations which can also be learnt within the dual system. Moreover, the chambers, as the competent bodies for vocational training within the dual system, tend to be rather reserved in their attitude toward the founding of new full-time specialized vocational schools of this type. We should bear in mind that the *Länder* are also responsible for full-time specialized vocational schools that provide training in occupations which can only be gained at school and that they are responsible for the relevant examinations and certificates as well. This type of full-time specialized vocational school will most likely become more important since these schools offer training in occupations which are not found in the dual system. These include occupations such as data engineering assistant, computer science technical assistant, computer science economics assistant or biology technical assistant.

Health and social welfare schools

3.3.2.
It is rather strange that training for health and social welfare occupations is paid little attention in discussions on vocational training policy in the Federal Republic of Germany. After all, in 1990 approximately 107 500 pupils, of whom 89 700 were girls, were trained at health system schools to become nurses, midwives, physiotherapists, technical medical assistants, speech therapists, etc. These schools are 'special educational establishments' (Federal Ministry of Education and Science, *Berufsbildungsbericht 1984*, p. 47). For the most part they are organized by and housed in hospitals which provide theoretical and practical instruction as well as practical training.

Health system schools are not uniformly equipped. This has partly to do with the fact that occupations within the health system are partly regulated by federal law and partly by *Länder* law. The same applies to the legal classification of schools in the health system; these differences pertain to admission requirements and period of training as well as examinations and the names of schools, which are only occasionally called 'full-time specialized vocational schools'.

Training for social welfare occupations (kindergarten teacher, youth worker, family welfare worker, geriatric welfare worker, etc.) is provided at 'specialized institutes' which are not, however, 'genuine' specialized institutes, i.e. they do not provide continuing training. They are in fact more like full-time specialized vocational schools. In Rhineland-Palatinate, for example, training to become a kindergarten teacher, youth worker, family welfare worker, geriatric welfare worker, kindergarten assistant or special child welfare worker takes three school years. In the first two years the focus is mainly on theoretical training with practice-oriented training in the third year.

3.4. Special forms of initial training

Double qualification training courses

3.4.1.
Double qualification training courses are of minor importance in Germany with few training establishments offering such courses and few pupils taking them. Yet this special form should be mentioned here because it reflects the efforts being made to integrate general and vocational education. Double qualification training is not concerned with teaching and certifying two vocational qualifications in one course of training. These courses aim to qualify pupils in a training occupation and for higher education (usually at a specialized institution or general institution of higher education). Although the most diverse variants of double qualification courses have been tested in numerous pilot projects, at times with very positive results, this concept has not gained general acceptance. The initiator for developing and trial-testing such courses was the Education Commission of the German Council for Education (1965-75) with its Structural plan for the education system (1970). In this it was suggested that experiments be made to integrate forms of vocational schools with upper level grammar schools and upper level grammars school with vocational schools. The 'college school' (originally: 'college stage') of North Rhine-Westphalia was more impor-

tant and gained more publicity for its diverse approaches to double qualification training courses. Some special features of the college school are its:

- combination of general and vocational learning;
- combination of theoretical and practical learning;
- simultaneous preparation for an occupation and for (university) studies;
- coordination of teaching matter in the various subjects;
- classes taught by vocational school teachers and grammar school teachers.

Depending on the type of double qualification training course involved, different qualification combinations are planned and implemented.

Double qualification training courses – qualification combinations

Qualification	Higher education entrance qualification to a specialized institution	to a higher education establishment
Partial qualification in a training occupation within the dual system (for example industrial clerk)	x	x
Full qualification in a training occupation within the dual system (for example laboratory technician)	x	x
Technician qualification (for example state-examined technician, specialized in electro-technology)	x	
Qualification in an 'assistant' occupation (for example technical assistant-chemicals)	x	x

Source: Münch, 1987, p. 225

In the 1987/88 school year (more recent data is not available), only about 6 500 pupils completed double qualification training courses. The problem in combining general and vocational learning and, therefore, in developing double qualification training courses is to ensure that the curriculum includes the material needed to qualify pupils for an occupation and to prepare them for higher education at the same time. This means the learning contents for an occupation must be presented in such a manner that academic thinking and methodology are also taught. Another problem lies in the fact that double qualification training results in much more stress for pupils. The close cooperation needed between general education teachers and vocational training teachers who tend to 'lead separate lives' in the Federal Republic of Germany and between these teachers and the trainers in enterprises within the framework of double qualification training is not only a great challenge but also a tremendous opportunity. Because of the didactic and organizational complexity of double qualification training, there is little chance of it becoming more widespread.

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Special training courses for holders of the university entrance certificate

3.4.2.
In 1971, 85.8% of those qualified to continue on to higher education intended to do so; 6.5% were undecided. In 1990, 59.9% planned to take up a course of study while 22.8% were undecided. A certain percentage of those who are undecided begin a course of study at an establishment of higher education at a later date. Nevertheless, each year more and more pupils decide to undergo more practically oriented vocational training. Special training courses offered by trade and industry cater to this trend. The courses were set up 20 years ago and have become increasingly popular since then. These special training courses for holders of the university entrance certificate may be regarded as a special form of dual training as they combine training in enterprises with instruction at school. These courses do, however, differ from regular training in the dual system both in their higher demands and objectives as well as in the structure of their school elements. While the practical parts of training are carried out at an enterprise, as with apprenticeship training, the theory is taught at vocational academies or at administration and economics academies. Practical vocational training is alternated with theory.

Special training courses in economics for holders of the university entrance certificate differ from training within the dual system as follows:

- participants enrolled in these special training courses, like normal trainees, have a training relationship based on a training contract. The contract is drawn up independently of the regulations and norms of the Vocational Training Act, however;

- participants must at least have a certificate qualifying them to enrol in a short course at a specialized institution of higher education: the majority hold 'normal' university entrance qualifications, however. No specific school certificate is required for admission to a training programme within the dual system;

- the qualifications and certificates acquired in these special training courses are, as a rule, much higher than the level of the skilled worker examination. Examples of such qualifications are those of commercial assistant, engineer's assistant, technical mathematic assistant, business economist and engineer;

- while stage-based training no longer plays an important role within the dual system, training courses in stages are standard in special training courses for holders of the university entrance certificate. For example, a course of training at the vocational academy of Baden-Württemberg leads to an engineer's assistant certificate in two years and, after an additional year, to a diploma in engineering (BA)(BA = vocational academy);

- in contrast to the dual system, long practice-oriented periods in an enterprise alternating with long blocks of theory (for example at a vocational academy) is the rule;

- finally, training for holders of the university entrance certificate takes much longer in special training courses than in the dual system where the training period for them is shortened by a year as a rule.

Participants in special training courses for holders of the university entrance certificate in enterprises and at vocational academies

Places available in 1991: approximately 13 000 (1990: approximately 11 000) according to sector		%
Electrical engineering industry	4 237	32.6
Commerce	2 813	21.7
Metalworking industry	1 658	12.8
Chemicals industry	1 182	9.1
Banking sector	660	6.1
Food industry	407	3.1
Energy supply	265	2.0
Insurance	212	1.6
Other sectors	1 566	12.1
according to courses of training		
Commercial branch	8 975	
Engineering	2 674	
Mathematics-technical branch	1 351	

Source: IW-Umfrage, 36/1991, Deutscher Instituts-Verlag

In 1991, 3 000 large, small and medium-sized enterprises took part in special training courses for holders of the university entrance certificate. The enterprises reckon with costs of about DEM 75 000 per training place. Holders of the university entrance certificate in special training courses receive a monthly allowance of DEM 1 069 (1991). The majority of graduates from these courses remain at the company that trained them once they have completed training; their starting salaries average DEM 3 681 (iwd, No. 36, 5.10.1991, p. 2). The number of applicants far exceeds the supply of training places. Competition is greatest for commercial training courses; in 1991 there were 34 applicants for each place offered; in the field of engineering there were 23 applicants per training vacancy. For all the advantages of this type of training, combining a high level of practical competence connected with theoretical reflection, it has also been subject to criticism. Since training is aimed at the special needs of the enterprise, this restricts graduates' potential for mobility, say the critics.

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3.5. Programmes conducted by the labour authorities

The labour authorities (Federal Labour Office in Nuremberg together with the *Länder* labour offices and local labour offices) fulfil a very important role in Germany with regard to labour market policy. Part of their job lies in initiating and financing courses to prepare workers for an occupation and to improve people's chances of being integrated into the workforce. In the strict sense, these measures, which are implemented in the form of full-time courses, do not have a vocational qualifying character nor are they 'schools'. Nevertheless, they represent a noteworthy factor within the entire spectrum of vocational training measures. The running of courses initiated and financed by the labour authorities is commissioned to various providers such as enterprises, the chambers, the Christian Youth Project of Germany (*Christliches Jugenddorfwerk Deutschland*), the Kolping Werk, the International Organization for Social Work (*Internationaler Bund für Sozialarbeit*), etc. According to the Labour Promotion Law (§ 2), measures should contribute, inter alia, towards:

(1) preventing the occurrence or continuance of unemployment or underemployment, on the one hand, and labour shortages on the other;

(4) promoting employment opportunities for physically, mentally or psychologically handicapped persons;

(6) providing employment opportunities for ageing and other gainfully employed persons who are difficult to place in the normal conditions of the employment market,....

The courses last up to a year and are held as open or residential courses. Residential courses are provided in particular for those young people who, due to the type and scope of their behavioural problems, should be placed temporarily in a new social environment where they can live in a communal setting and receive socio-educational help.

For all the courses they finance, the labour authorities cover the costs of the institution and they grant a vocational training allowance to course participants. They assume course fees and other such expenses.

Courses differ depending on the target group (for example preparation for first job, the disabled, unemployed foreigners, etc.), according to the 'purpose' (for example imparting basic qualifications or motivating participants to start vocational training, etc.) and in length (a year at most).

A description of individual courses is not possible here; moreover these preparation measures have had a very chequered history over the last 20 years (Schober, 1990). In the 1987/88 training year the Federal Labour Office sponsored work preparation training measures for nearly 74 000 young people. The number of participants in these courses is declining, particularly due to the relaxation in the training place market.

CONTINUING VOCATIONAL TRAINING

4.1. Basic data and structures of continuing vocational training

Concept and forms of continuing vocational training

4.1.1.
While the predominant system of vocational training in Germany, the dual system, is comparatively well structured, standardized and yet clearly separate from other areas of education, continuing vocational training is a very complex field which defies easy comprehension not only for foreigners. To speak of a 'system' would be to overlook the diversity of continuing vocational training, which has developed both historically and pragmatically. The matter is further complicated by the somewhat ambiguous use of the term but any attempt to explain the diverse interpretations in detail here would exceed the bounds of this report (Münch, 1987, pp. 205 ff.).

Continuing vocational training, as cultural, political and academic/scientific continuing training, is adult education aimed at maintaining or upgrading occupational qualifications that have been acquired either through formal training or practical experience. The impetus to pursue continuing vocational training is prompted above all by:

- rapid changes in the world of work in general;
- the pace of organizational changes;
- the speed and scope of technological innovation;
- changes in factors influencing enterprises (for example the environment and environmental protection);
- the constantly increasing trend toward occupational mobility.

Although the Vocational Training Act delineates the parameters for vocational training directly and comprehensively, it mainly outlines *possibilities* for regulating continuing vocational training (see paragraph 4.5.1.) and does so using different terminology.

- Further training shall be designed to enable a trainee to maintain or extend his vocational knowledge and abilities, adapt himself to technical developments or obtain promotion in his chosen occupation (§ 1, paragraph 3).

Despite the wording of this law, the term continuing vocational training is generally used in education policy, scientific discourse and literature. However, the term vocational further training frequently appears in measures financed according to the Labour Promotion Law (see paragraph 4.5.2.). Throughout the following, the term continuing vocational training will be used, unless otherwise called for. The Vocational Training Act in accordance with § 1, paragraph 3 of the said Act identifies two core areas of continuing vocational training:

- updating training; and
- upgrading training (for promotion purposes)

The purpose of updating training is to keep those people with vocational qualifications abreast of scientific, technological, production, service and organizational developments. Updating training is not generally linked with promotion processes. Upgrading training is normally intended as a means of obtaining higher job qualifications, and with or without a certificate, these qualifications are regarded as the prerequisite for promotion.

In vocational training policy discussions we often find that retraining, in a broader sense, is grouped with continuing vocational training, even though the Vocational Training Act (§ 1, paragraph 4) specifically states that: 'Retraining shall be designed to qualify a trainee for another form of occupational activity.' There is no clear dividing line between retraining and continuing training as far as the contents and qualifications are concerned. Vocational rehabilitation and reactivation are special forms of continuing vocational training. Under vocational reactivation, we think of those continuing training measures which impart knowledge and skills, or update them, when they have been forgotten or become outdated due to a long absence from the working world. By vocational rehabilitation, we mean measures aimed at reintegrating into the workforce those adults whose original vocational qualification or ability to work has been partially or wholly lost due to an accident or illness. To a certain extent, this deals with retraining handicapped persons. In the broad sense of the term, an orientation period or familiarization as preparation for a new job or new workplace – usually on the job – can also be included as a form of continuing vocational training.

The abovementioned types and forms of continuing vocational training, to which the increasingly significant informal learning processes at the workplace must be added, provide the first evidence of the great diversity of continuing vocational training.

Importance of continuing vocational training

4.1.2.
Within the whole spectrum of vocational training in the Federal Republic of Germany, continuing vocational training is certainly the most dynamic. This holds true when compared to initial vocational training in the dual system, which is taking on more and more the character of starting qualifications. It also applies when compared to the other forms of continuing training. The reasons for this – rapid economic, technological and social change – cannot be highlighted individually here. The largest share of continuing vocational training is devoted to updating training measures which are mainly carried out by enterprises, the point where change crystallizes. This has resulted in enterprises becoming the most important providers of all forms of continuing vocational training. Approximately 50% of all continuing vocational training and about one-third of the time spent on continuing vocational training is claimed by in-house continuing training which consists primarily but not exclusively of continuing vocational training. Although surveys showed that in 1988, about 53% of participants attended continuing non-vocational training and 47% continuing vocational training the time factor told a different story: continuing vocational training clearly dominated with 74%.

Despite the great and growing importance of continuing vocational training, statistical data on it is lacking. This applies in particular to continuing vocational training conducted by firms.

This problem notwithstanding, there is a Continuing Training Report System, commissioned by the Federal Minister of Education and Science and developed by Infratest Sozialforschung, which has been carried out every three years since 1979. Information on the volume of continuing training and data from other sources were included in this representative survey in 1988. This integrated report on continuing training in general confirms that continuing training is an expanding field and that continuing vocational training is growing at a faster rate than general continuing training.

Governmental and market aspects of continuing vocational training

4.1.3.
As we have already indicated, continuing vocational training in the Federal Republic of Germany does not fulfil the criteria of a system in the sense of it being regulated in a comprehensive and differentiated fashion. The multiplicity of its objectives and forms and the dynamism it requires result in continuing vocational training being more of an open and flexible field, subject to continuous change. The state can only be minimally involved in organizing and regulating such a system. This clearly explains why inhouse updating training in particular is by and large autonomously organized by the enterprises. After all, the Industrial Constitution Law contains procedural principles to help employers and employees reach agreement on a joint concept for continuing training. The chambers have vocational training committees (on the basis of the Vocational Training Act) in which employers, employees and vocational schools have equal representation and these committees are responsible for policy making in continuing vocational training. This model of equal representation and responsibility also exists in the organs of the labour administration – at federal, *Land* and local labour offices – where the arrangements for continuing training (further training) and retraining are decided upon. A tighter network of regulations, including some governmental ones, exists for upgrading training, which is carried out for the most part outside the enterprises and by external providers. This is necessary due to the fact that much upgrading continuing training concludes with an examination and the awarding of a recognized certificate and recognized qualifications.

In a few areas of continuing vocational training, the state is directly involved for example in specialized institutes (see paragraph 4.3.2.). According to the Basic Law, the *Länder* are responsible for these sites of learning which provide what can only be called 'upgrading training' by virtue of the admission requirements (completed vocational training and occupational experience) and objectives (for example promotion from skilled worker to technician). However, specialized institutes with about 115 000 enrolments (1990) represent only a small slice of the entire spectrum of continuing training activities. Because of the diverse array and market-like interaction between the supply of and demand for continuing training, we can speak of a continuing training 'market' in Germany even though it is partially controlled and regulated (See Bergner et al., 1991, p. 26).

The question of a comprehensive legal regulation of continuing training, and with it, continuing vocational training, has been the subject of much controversial discussion in Germany over the past few years, with the Social Democratic Party and trade unions taking the one side and the Christian Democratic Union, the Free Democrats and employers the other. The Social Democratic Party and the

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trade unions believe that the training needs of employees and the quality of continuing training offers could be guaranteed more satisfactorily with the aid of a comprehensive continuing training law. Their 'opponents', on the other hand, point to the fact that the dynamic range of needs and objectives, particularly in continuing vocational training, escape comprehensive and detailed legal regulation. The debate is plagued by vagueness since, for the most part, no distinction is made between updating training, which is largely (and necessarily) determined and needed by enterprises, and upgrading training which goes beyond the individual enterprise and has the acquisition of particular 'qualifying' certificates and qualifications as its goal.

4.2. Target groups and participants in continuing vocational training

More or less all levels of the workforce including the unemployed, whose continuing vocational training is of particular significance for labour market policy, engage in continuing vocational training. The ratio of which sectors of the workforce take advantage of continuing vocational training fluctuates, at times considerably, according to sector, size of enterprise and occupational position. For example, the staff of electrical engineering enterprises attend continuing vocational training far more frequently than the staff of textile companies. The participation rate is higher in large enterprises than in small ones. Vocational qualifications and position have an enormous bearing on whether or not and how often personnel attend continuing vocational training. The participation rate is plainly disproportionately high among management personnel and equally distinctly disproportionately low among skilled, semi-skilled and unskilled workers.

This was and is a result of the conduct of enterprises as the most important providers of continuing vocational training. The impact of new technologies and new developments in labour organization affecting all sectors of the working population seems to be instigating a change at the present time. All groups in society are becoming more and more aware of the importance of giving everyone an equal chance to take part in continuing vocational training, not only because of the general significance of continuing vocational training but also because of its value in achieving the goals of vocational training, labour market and innovation policies.

The following table demonstrates the development in attendance rates of the general population. It deals specifically with the portion of continuing vocational training that is financed through the Labour Promotion Law. By far the largest portion of continuing vocational training is not financed by the Labour Promotion Law and has therefore not been included here. Nevertheless, the table does give an essentially accurate picture of the basic structure of attendance rates.

Participation in continuing vocational training 1979-91[1]

	Participation in the final year as %				
	1979	1982	1985	1988	1991
I have been retrained for another occupation through training courses	1	1	1	1	2
I have attended training courses for promotion purposes	2	2	2	3	3
I have attended in-house training to become familiar with new work	3	4	3	4	4
I have attended updating training to learn new facets of my occupation[2]	-	-	-	8	10
I have attended other training courses in my occupation	6	8	8	9	8
Attendance at at least one of these measures = Attendance rate at continuing vocational training[3]	10	12	12	18	21

[1] Surveys taken between 1979 and 1988 refer to the old federal *Länder*; the survey from 1991 covers the old and new federal *Länder*.
[2] This category has only been included since 1988. Prior to then this category was included under 'other training courses'.
[3] Since many people take part in several different training measures, the sum of the individual categories is higher than the individual attendance rates!

Source: Kuwan, Berichtssystem Weiterbildung 1991

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Enrolment in continuing vocational training measures according to objective or type – from 1980 –1988

Year	Enrolments			
	Overall totals	Of which: Further Vocational Training	Vocational Retraining	On-the-job Orientation
1980	246 975	176 467	37 927	32 581
1984	353 140	290 746	43 057	19 337
1988	565 611	448 736	65 706	51 169

Source: Bergner, 1991, p. 62

The numbers reflect the general trend, i.e. a continual rise in the number of people enroling in continuing training measures. This clearly demonstrates that the Federal Labour Office's policies for continuing vocational training focus on the labour market. Above all, continuing vocational training is intended to improve the occupational opportunities of women, who are still at a disadvantage when it comes to work, and give the unemployed a chance to enter into employment. The economic restructuring processes in the new *Länder* have made these goals even more important.

4.3. Providers and institutions of continuing vocational training

The role of enterprises

4.3.1.
Without a doubt enterprises hold a very special position among the providers and suppliers of continuing vocational training. Firstly, they are the most important providers of continuing vocational training in terms of the number of participants (about 50%) and their sheer volume of continuing vocational training (over 30%). Secondly, not only do they demand continuing vocational training, they supply it as well. These internal continuing vocational training markets adhere exclusively to the needs and conditions of individual enterprises, with relatively few restrictions imposed by the Industrial Constitution Law. This is one of the reasons why we know so relatively little about in-house continuing vocational training despite its enormous importance. In addition, 'If we examine the findings on the largest area of continuing training, inhouse continuing training, we find the various information sources come to very different conclusions' (Kuwan et al., p. 285). Furthermore, it is also well known that the findings of employee surveys are much different from those of company surveys. The reasons for this (Kuwan et al., ibid.) cannot be addressed here. Despite the still incomplete and sometimes unreliable state of data currently available, we are able, nevertheless, to make significant and basically accurate statements on the role enterprises play in the Federal Republic of Germany with regard to continuing vocational training.

To begin with, the broad spectrum of continuing training offered by enterprises can be seen in the following table:

Objectives of continuing training offered by enterprises

Updating training — **Innovation training**
- related to work place
- related to enterprise
- related to occupation
- related to technology
  - product-based
  - process-based
- related to organization

Updating training — **Management training**
- specific to enterprise
- beyond the enterprise
- beyond the sector
- dependent on enterprise and duties

Fundamental continuing training
- basic mathematics
- basics of natural science
- basic business economics

General continuing training
- company policy
- culture
- sports and hobbies

Large-scale enterprises usually provide all types of continuing training, including general continuing training. Even fundamental continuing training is offered in many large-scale enterprises, although these offers are usually closely related to the 'actual' continuing vocational training or serve as an important prerequisite for it. While the spectrum of continuing training offered in large-scale enterprises is all-encompassing and differentiated in terms of objectives, small enterprises as a rule only offer updating training. In general we can say that the continuing training activities of a company increase with its size.

Before we continue to expound upon the starting position and situation of continuing vocational training in enterprises, we should draw attention to a change in paradigm that seems to be gradually gaining a strong foothold. Previously, the most important area of in-house continuing vocational training was updating training, the 'accomplice' lagging behind in the face of organizational and technological change. But now continuing vocational training is taking on an innovative and anticipatory character.

Special features of continuing vocational training in enterprises are:

- the measures mainly reach workers above the level of skilled worker, i.e. management, but recently have included skilled-workers more and more;
- the measures are normally short-term (usually less than a week);
- the objectives and contents of continuing vocational training are determined by the enterprises themselves since they are both supplier and demander;

- in large and medium-sized enterprises, continuing vocational training is mainly carried out by their own personnel;

- most of the continuing vocational training is financed by the enterprises themselves.

Enterprises see their function as providers of continuing vocational training in different ways:

- the enterprise is an autonomous provider and organizer of continuing vocational training for its own employees;

- the enterprise carries out training measures commis-sioned by the Federal Labour Office, particularly for unemployed workers;

- the enterprise is a partner to other continuing training providers, other enterprises and external providers;

- the enterprise utilizes external continuing training institutions (usually private also) to which it sends its own employees.

According to the findings of a case study (Bardeleben et al., 1990, p. 72), 16.1% of attendance hours were devoted to external continuing training measures. In smaller enterprises this percentage is significantly higher, however, and small enterprises frequently carry out no continuing vocational training of their own.

Large-scale enterprises usually maintain their own continuing training departments and publish sometimes quite thick catalogues, to inform their employees about what they offer. This is an indication that in-house continuing vocational training is (still) strongly offer-oriented. Yet demand-orientation is catching on more and more. More than ever before it is based on continuing training needs, needs that are determined with the help of systematic analyses. The enterprise as a 'learning system' is an approach that seems to be gaining increasing importance and one which leads to a decentralization of the organization and control of the continuing training activities in enterprises.

Continuing vocational training in specialized institutes

4.3.2.
The entry requirements of specialized institutes are always the completion of a relevant vocational training course or comparable practical experience in the occupation; as a rule, additional work experience in the field is called for in the case of the former. Specialized institutes provide in-depth specialized vocational training and promote general education. Full-time training courses at specialized institutes usually last at least one year, while part-time training courses last correspondingly longer (Designations for Structuring Vocational Schools – Decision of the Standing Conference of the Ministers of Education and Cultural Affairs dated 8 December 1975).

Accordingly, specialized institutes are places of upgrading training for those who attend them. A skilled worker can undergo training to become for example a master craftsman (at a 'master craftsman school'), a technician (at a 'technical college'), etc. In line with their close integration in the developments and qualification needs of the economy and technology, specialized institutes demonstrate a vast array of areas of specializations and points of focus. Within

the public system of vocational training, specialized institutes hold a permanent and undisputed position. The number of adults attending them remains relatively constant, regardless of economic fluctuations. In 1990, 82 200 persons attended specialized institutes full-time and 33 200 attended part-time. Examinations at the specialized institutes are mainly state examinations. Thus, someone who has attended an institute specializing in technology, has the title of 'State-certified Technician' once he has passed the examination. Although completed vocational training and several years occupational experience are generally the prerequisites for admission to a specialized institute, it is interesting that no particular (general) education certificate is required. In this way, specialized institutes follow on from the 'openness' of the dual system, which likewise has no restrictions based on educational background. Under certain circumstances, persons attending a specialized institute are given financial support according to the terms of the Labour Promotion Law.

For the sake of completeness we should also mention that according to a decision of the *Land* Ministers of Education and Cultural Affairs of 14/15 March 1991, another type of vocational training school, namely the vocational school, as a partner within the framework of the dual system, can also assist in further and continuing vocational training in accordance with Land legislative regulations. This could result in a link between training and continuing vocational training within the school area. It remains to be seen whether developments of any consequence will come of this.

Other providers of continuing vocational training

4.3.3.

In addition to enterprises and specialized institutes which are important providers of continuing vocational training, there is also a 'free' market of mainly private providers. Some of these are non-profitmaking, others are commercial and they are more or less competitors on the market. This market is something of a maze for seekers of continuing vocational training due to the great number and variety of institutions as well as the various offers which differ in terms of goals, length and cost. No one knows just how many institutions exist at the present time. The following lists the most important groups of providers and describes them briefly.

The Chambers

The most important providers are the Chambers of Industry and Commerce and the Chambers of Handicrafts of which there are 87 and 59 respectively throughout the Federal Republic of Germany (including the new *Länder*). They are bodies governed by public law and subject to the legal supervision of the highest regional authorities. According to the Vocational Training Act, they are the 'competent bodies' for regulating and controlling vocational training, retraining and, as the term reads in the text of the law, further training. They are financed through the contributions of their members and are relatively active in updating training as well as upgrading training.

Technical academies

These are institutions which, in keeping with their name, originally used to conduct technical continuing training only. Today, they also carry out continuing training measures in the areas of personnel and social welfare, personnel management and personnel development. Technical academies usually have the character of non-profitmaking associations whose members are companies and municipalities.

Commerce and Industry Training Associations
Each federal *Land* has its own Commerce and Industry Training Association. They have the legal status of a non-profitmaking association; members are not individual enterprises, but as a rule employers' associations, and to be more precise, their regional i.e. *Land* associations. Unlike the technical academies, they do not conduct technical continuing training. They are financed through membership fees, too, however.

Further Vocational Training Associations
These are the non-profitmaking educational facilities of the German Trade Union Federation and the German Salaried Employee Union. They concentrate on updating training and retraining and are only involved in upgrading training to a limited extent.

Various (private) providers of continuing training
From the large and not precisely ascertainable number of these providers of continuing training, only three will be listed here as examples:

- *ASB-Management Seminar (Heidelberg)*
- *Deutsche Gesellschaft für Personalführung (Düsseldorf)*
- *Universitätsseminar der Wirtschaft Schloss Gracht*

The three institutions mentioned above are non-profitmaking associations whose members are companies. With their courses they cater for the continuing training needs of company executives.

Adult education centres
With approximately 1 000 centres and about 4 700 branches, adult education centres are the most widely known institutions of adult education. Originally, they were exclusively providers of cultural and political continuing training, but now they provide vocational continuing training as well. However, continuing vocational training does not make up the bulk of their courses.

Part-time tertiary level courses (parallel to work)
- Continuing training course in business education (Landau)
- Continuing training course on 'Personnel Development in Enterprises' at the Braunschweig University of Technology.

Both courses qualify students for employment in personnel development. The former, which is run by the *Akademie für Führungspädagogik* in Landau in cooperation with the universities of Koblenz/Landau and Erfurt, leads to a diploma degree under certain circumstances. The diploma is the prerequisite for admission to the latter course mentioned above.

The differences between and the variety among providers of continuing vocational training make it seem justifiable to speak of a 'continuing training market'. Indeed it has the character of a 'supermarket'; while all the products may be labelled 'continuing training', they differ widely in type and quality. The demand for a legal regulation of continuing training as a whole is founded on this argument, but it only seems to be justified to the extent that it would result in better quality control. Moreover, comprehensive legal regulations such as those governing vocational training, which are of undisputed necessity, would in all likelihood not be able to take into account the necessary dynamics or the equally necessary wealth of variety within continuing vocational training.

Distance learning

4.3.4.
In 1991, distance learning was provided by 138 distance learning institutes and was utilized by over 100 000 people (Press release of the BIBB, June 1991). It is used above all in the sense of upgrading training as a foundation for occupational advancement. The number of distance learning courses totalled more than 1 200 in 1991.

Distance learning material, usually in the form of teaching documents sent by mail, is being used by enterprises more and more often as well. In 1990, about 20 000 in-plant distance learners from about 800 enterprises used distance learning course material. In such cases, distance learning often serves to supplement other continuing training offers. Small and medium-sized businesses in particular are likely to fall back on distance learning opportunities more and more. They are reasonably priced and can offset insufficient in-house capacity and a lack of local external courses.

Enterprises realize, however, that workers with low qualifications have special difficulties with distance learning. Therefore, one-sidedly favouring this type of continuing vocational training would mean putting this group of workers at an additional disadvantage. Whenever enterprises fall back on distance learning for their employees, there is a reasonable guarantee that only serious offers will be used. Private individuals seeking continuing training are usually not in a position to evaluate the quality of extra-plant distance learning programmes on offer. For this reason, a quality-control system exists and it has been proving its worth for quite some time now.

The Distance Learning Protection Law of 1 January 1977 contains regulations on the registration of vocational training distance learning courses. Accordingly, a vocational training distance learning course might not be approved if the content, length, goals, the way it is to be conducted or other aspects do not comply with the objectives of vocational training as laid down in the Vocational Training Act.

The State Headquarters for Distance Learning in Cologne in conjunction with the Federal Institute for Vocational Training decides whether a distance learning course providing vocational training will be approved. This is especially important since there are also vocational distance learning courses which prepare participants for government and public/legal examinations. As a whole, distance learning is seen as an important area in the entire spectrum of continuing vocational training.

4.4. Continuing vocational training personnel

Whenever continuing vocational training is conducted in public institutions such as specialized institutes or establishments of higher education, training, recruitment and activities of teaching staff there will comply with the criteria laid down by the state for teachers and educators in higher education. For all other areas and institutions of continuing vocational training, no regulations exist concerning teaching personnel. As a rule, continuing training instructors, whether they teach in an enterprise or at an external training centre, perform these tasks in addition to their main occupation. The relatively few full-time continuing training staff are usually found in training management and therefore teach little or not at all.

Similar to the case of trainers in initial vocational training, continuing vocational trainers do not seem to follow any single recognized career path. As a rule, they are specialists highly qualified in the field in which they work as continuing trainers and they have many years of experience to fall back on. With increasing importance being attributed to aspects of corporate culture, and emphasis being placed on the behavioural dimension in continuing training, there is much discussion in Germany as to how the high level of specialization, which continues to be essential, can be bolstered through competency in methods and didactics.

Under the aspect of quality assurance in vocational training, too, which primarily depends on the quality of trainers and continuing trainers, the issue of continuing training to become a continuing trainer becomes more acute. No one is seriously proposing taking this professionalization of the majority of continuing trainers so far as to make a fundamental and long-term profession out of it, however.

4.5. Legal structural conditions

Regulations in the Vocational Training Act

4.5.1.
As mentioned above, the Vocational Training Act of 1969 not only defines initial vocational training but also continuing vocational training ('further vocational training' and 'retraining'). While the additional regulations in the Vocational Training Act directly regulate initial vocational training, they primarily make regulation possible for continuing vocational training. Thus, the competent body (i.e. the chambers) may conduct examinations 'to test the knowledge, skills and experience acquired as a result of vocational further training' (§ 46, paragraph 1). However, the Federal Minister of Education and Science, acting in agreement with the Federal Minister of Economics or any other minister under whose jurisdiction it might fall, may by ordinance enact continuing training regulations 'as a basis for an orderly and uniform system of further training and the adaptation of that system to technological, economic and social requirements and changes in the same' (§ 46, paragraph 2). This also applies to 'vocational retraining'.

The Federal Government as well as the competent bodies (particularly the chambers of industry and commerce) have made use of this right. Thus, in the Federal Republic of Germany, 15 different national standard qualifying examinations exist within continuing training for a skilled worker to take in order to become an industrial master craftsman/woman.

These (and other) regulatory measures of the Federal Government serve in particular:

- to harmonize measures of supra-regional importance;
- to set up a system of state recognition of continuing training qualifications and along with it, continuing training achievements accomplished outside the school system;
- to improve the comparability and openness of continuing vocational training (Lipsmeier, 1990, p. 367).

Promotion of continuing vocational training through the Labour Promotion Law

4.5.2.
On the basis of the Labour Promotion Law, the Federal Labour Office and its regional labour offices make extensive funds available to promote continuing vocational training. These funds are raised through the contributions paid in equally by employees and employers. The financial support of continuing vocational training occurs within the framework of the Federal Labour Office's tasks related to labour market policy. Within the framework of so-called individual support, participants in continuing vocational training measures are, under certain circumstances, fully or partially reimbursed for course fees paid to course organizers or they are sent on programmes that are completely financed by the labour administration. In addition, participants are paid a maintenance allowance amounting to 68% (or 73% for married persons) of their last net wages, either as a grant or a loan, for the duration of full-time further training measures. Over

and above this, within the framework of what is known as institutional support, continuing training centres can receive grants for furnishings, equipment and buildings. According to the labour market policy objectives of the Labour Promotion Law, continuing vocational training is promoted not only for the gainfully employed, but, above all, for the unemployed.

In the wake of restructuring the economy in the new *Länder* from a planned economy to a market economy, the Labour Promotion Law with its promotion opportunities has gained even greater importance. The percentage of unemployed persons undergoing continuing training there is especially high, while this group is on the decline in the old federal *Länder*. While from 1984–1986, two-thirds of continuing training participants came from the ranks of the unemployed, in 1988 this figure had dropped to 56% of those starting continuing training.

The following figure illustrates the importance of the Labour Promotion Law over and above its significance in promoting continuing training.

The Labour Promotion Law

Federal Labour Office

11 Land labour offices

184 Labour affices

Employment policy	Maintaining and creating workplaces	Unemployment services/benefits
• Labour market and work research • Vocational counselling • Job placement • Promotion of vocational training: initial and further vocational training and retraining • Support when starting work • Vocational services for rehabilitation	• Short-time allowance • Promotion of employment throughout the year in the building trade promotion of building in winter bad weather compensation • Job creation measures	• Unemployment benefits (service of unemployment insurance) • Unemployment assistance • Payment of net earnings for three months before bankruptcy proceedings begin • Payment of health, accident and retirement insurance of those receiving benefits

Source: Erich Schmidt Verlag, 153 110

In 1991, the Federal Labour Office spent approximately DM 72 billion on its work and for its services. About DM 12 billion of this went to initial and further training (excluding maintenance allowances).

Educational leave laws and continuing training laws

4.5.3.
In a number of *Länder*, there are regulations that guarantee employees five or four (Lower Saxony) days of educational leave per year for organized vocational or political education. Wages and salaries continue to be paid by the employer during this period of educational leave. It is up to the employee to decide what organized training he would like to attend. Whereas political education is usually state-funded, the fees for continuing vocational training are paid mainly or exclusively by participants. Taking the actual number of participants as a yardstick, and not the millions who are entitled to it, educational leave plays only a very minor role at the present time. Only about 3% of those entitled to it currently take advantage of educational leave opportunities! The reasons for this are manifold and cannot be addressed here.

Just as the educational leave laws stipulate that enterprises grant and finance educational leave for their employees, so, too, do the continuing training laws of the *Länder* regulate for the most part the financing of adult education centres. The latter provide only a small amount of continuing vocational training; the bulk of their courses deal with non-vocational training. Institutions, in particular adult education centres, and, under certain circumstances and for certain courses, individuals, are given financial support. The continuing training laws have no influence on what is offered as continuing training as a whole, nor on the structure and contents of individual continuing training course programmes.

Collective-agreement regulations on continuing vocational training

4.5.4.
The growing importance and necessity of continuing vocational training is being taken into account more and more in collective agreements. The opinion is echoed that collective-agreement regulations are more flexible and closer to reality than general stipulations in the educational leave laws can ever be. Opponents of this theory see preferential treatment and discrimination in collective-agreement regulations, depending on which sector the employee belongs to and whether that sector has a collective agreement or not.

In 1988, approximately 330 important collective agreements covering 17 400 000 million employees were made. Leave regulations for educational purposes were included in about 90 of the agreements which covered 6 700 000 million employees. The educational spheres named and regulated in these collective agreements are:

- occupation-oriented continuing training and qualification;
- political and cultural education;
- vocational examinations;
- training of members of the works council and other position-holders and their attendance at conferences and meetings.

According to the majority of the collective agreements, the employer continues to pay wages for the duration of the leave; other collective agreements provide for unpaid leave, and others again limit the circle of entitled persons to members of the works council and other position-holders. Other variations of collective agreements regulate continuing training within the framework of rationalization protection programmes or in connection with social plans. Thus, they regulate, for example, the extent to which workers whose jobs have been affected by technical innovations will be retrained or receive continuing training. Since employees in these circumstances are directly threatened with unemployment, they are supported partially or completely through Federal Labour Office funding on the basis of the Labour Promotion Law.

The so-called collective agreements on qualification represent a new generation of regulations. These are intended to bring about comprehensive, prevention-oriented continuing training concepts which can contribute to the humanization of work. The network of these regulations is linked as follows:

- employees are entitled to paid continuing training both during working hours and throughout their working life;
- the works council's rights to co-determination in implementing continuing vocational training are improved;
- work organization (optimum combination of labour and technology) should be changed so as to motivate employees to develop their level of qualification further by means of continuing vocational training. At the same time, this should help to counteract de-qualifying division of labour;
- participation in continuing training will be tied to questions of wages and salaries.

Such modern and future-oriented agreements were concluded, for example, between *Volkswagen AG* and *IG Metall*, the *Innung für Sanitär-, Heizungs- und Klimatechnik Berlin e.V.* and *IG Metall*, as well as between the *Verband der Metallindustrie Baden-Württemberg* and *IG Metall*.

5 ORGANIZATION AND RESPONSIBILITIES

5.1. Organization and competence structure in the dual system

As we have already stated, the competence structure in vocational training in the Federal Republic of Germany is characterized above all by the fact that the Federal Government is responsible for vocational training conducted in enterprises and the *Länder* are responsible for vocational training held in schools. This clear division of competences as defined in the Basic Law is countered by a relatively complicated organizational and competence structure which is illustrated in a very simplified form in the following diagram.

Organistation and competence structure in the dual system

Coordinating committee
Federal Government
Federal Ministry of Education and Science
Federal Ministry of Labour and Social Affairs
Federal Ministry of Economics
The competent specialized ministries
Federal Institute of Vocational training
Secretary-General Board
Land committee
Specialized committees
Committee for Issues of the Handicapped
Land committees for vocational training
The competent Land ministries
Competent bodies
Vocational training committee of the competent bodies
Standing Conference of Ministers of Education and Cultural Affairs
Land Ministries of Education and Cultural Affairs
Enterprises
Vocational schools
Guidelines, regulations
Implementation, supervision of legality of administrative acts Supervision
Counselling, recommendation
Cooperation, coordination

Source: Münch, 1987, p. 62.

On the basis of the Vocational Training Act, the competent bodies play an outstanding role. Competent bodies, in the sense of the Vocational Training Act, are the chambers of industry and commerce, the chambers of handicrafts, etc. There are, however, various federal and *Land* authorities that are also competent bodies, in particular for vocational training in the civil service. As public corporations, the competent bodies, if they are chambers, are subject to the legal supervision of the highest *Land* authorities. The most important duties of the competent bodies in vocational training are, in accordance with the Vocational Training Act:

- setting up and keeping the directory of vocational training relationships;
- promoting vocational training by providing counselling to enterprises and trainees;
- supervising the implementation of vocational training;
- conducting intermediate, final and further training examinations.

Again, in accordance with the Vocational Training Act in every competent body, i.e. chamber, there is a vocational training committee which is made up of six representatives of the employers, six representatives of the employees and six vocational training school teachers. The vocational training committee has to be informed and consulted on all important issues of vocational training. Important matters about which the committee has to be informed are, for example:

- plans of the competent bodies to organize and extend vocational training;
- occurrences on the labour market affecting vocational training;
- new training regulations and changes in training regulations;
- final examination results.

Moreover, the committee has to decide on the basis of the Vocational Training Act which legal regulations are to be passed by the competent body for the implementation of vocational training. Consequently, the vocational training committee of the competent body has power of decision. In accordance with the Vocational Training Act, the *Land* committees for vocational training are made up of an equal number of employer representatives, employee representatives and members of the highest *Land* authority. It is their task to advise their respective *Land* government on matters concerning vocational training which arise for their *Land*. Above all, in the interests of uniform vocational training, they must help to foster cooperation between vocational training conducted in schools and that in enterprises as well as taking account of vocational training in any re-organization and further development of the school system.

Although legal responsibility for apprenticeship training basically lies with the Federal Government, the *Länder* and their highest *Land* authorities (ministries) also fulfil certain tasks in connection with apprenticeship training. Depending on the *Land*, these tasks are performed either by the Minister of Labour or the Minister of Economics. This includes state supervision of the legality of administrative acts of the competent bodies in trade and industry (chambers of industry and commerce, chambers of handicrafts), and overall control (in certain cases) of planned financial support of apprenticeship training by the *Land*, such as granting investment allowances for external training workshops.

ORGANIZATION AND RESPONSIBILITIES

The Federal Ministry of Education and Science has a general and coordinating competence in issues of vocational training. This results in the following duties:

- overall control for the Vocational Training Act;
- competence for pivotal issues on vocational training policy;
- competence for the Federal Institute for Vocational Training;
- competence for issuing regulations on continuing vocational training and the educational qualification of trainers.

The respective specialized ministries are responsible for recognizing training occupations with the enactment of training regulations (for example the Federal Ministry of Economics for occupations in trade and industry). However, the specialized ministries can only pass training regulations such as credit and equivalence regulations in agreement with the Federal Ministry of Education and Science. In this way, the Federal Ministry of Education and Science exerts a decisive influence on the structure of vocational training.

The Federal Institute for Vocational Training, with headquarters in Berlin and Bonn, plays a very important role in vocational training policy, development and research.

The organs of the Federal Institute for Vocational Training are:

- the Board;
- the Secretary-General.

The Board decides on issues within the Federal Institute for Vocational Training that are not assigned to the Secretary-General. The Secretary-General represents the Federal Institute for Vocational Training in legal and non-legal matters. He administrates the Federal Institute and carries out its duties. A *Land* committee exists as a standing sub-committee of the Board; its task in particular is to work toward harmonization between the training regulations and the framework curricula of the *Länder* for schools, in so far as they come under the jurisdiction of the Federal Institute. According to a more detailed regulation in the statutes, the Secretary-General may appoint specialized committees to provide expert counselling for the implementation of particular tasks. A Committee for Issues of the Handicapped exists to counsel the Federal Institute for Vocational Training on its tasks in the area of vocational training of the handicapped. The Federal Institute for Vocational Training has the following duties:

- involvement in preparing training regulations and the Report on Vocational Education;
- involvement in compiling vocational training statistics;
- support in planning, setting up and further developing external training centres;
- promotion of pilot projects;
- advising the Federal Government on vocational education issues;

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- carrying out vocational training research in accordance with the research programme to be decided upon by the Board;

- supervising pilot projects;

- compiling and publishing the directory of recognized training occupations;

- reviewing and recognizing distance learning courses as well as counselling organizers of vocational training distance learning courses.

The Federal Labour Office is not part of the organization and competence structure of the dual system in the narrow sense, but within its overall spectrum of duties, it does fulfil various tasks that are important for vocational training. These include:

- vocational counselling;

- (financial) promotion of vocational training;

- (financial) promotion of the handicapped in work and employment (vocational rehabilitation).

In addition, the Federal Labour Office conducts research on the labour market and occupations. For this purpose, it maintains its own Institute for Employment Research in Nuremberg.

5.2. Collaboration between employers and employees

Employers and employees, and their organizations (employers' associations and trade unions) naturally take a great interest in vocational training and in influencing the way it is structured and run. Their interest has been taken into account by and large through legislation stipulating that employer and employee representatives be present in equal numbers in all institutions and committees dealing with vocational training issues and that they have more or less equal weight in these. This applies to the (previously mentioned) *Land* committees for vocational training, to the vocational training committees of the competent bodies as well as to the examination committees of the competent bodies. The same applies to the Board of the Federal Institute for Vocational Training and also the Federal Labour Office whose organs (Administrative Board, Board of Directors and administrative committees) are made up of one-third respectively of voting representatives of the employers, the employees and public bodies.

To conclude, in this connection we should call to mind the Industrial Constitution Law of 15 January 1972 and (for the civil service) the Personnel Representation Laws. According to these the works council or the personnel council and the youth delegation, as representatives of the employees, have an advisory and decision-making capacity in matters concerning vocational training conducted in enterprises.

While needless to say employers and employees do not always agree on all aspects of vocational training, cooperation of the social partners in institutions, committees and other bodies relevant to vocational training has withstood the test of time.

5.3 Competent authorities of continuing vocational training

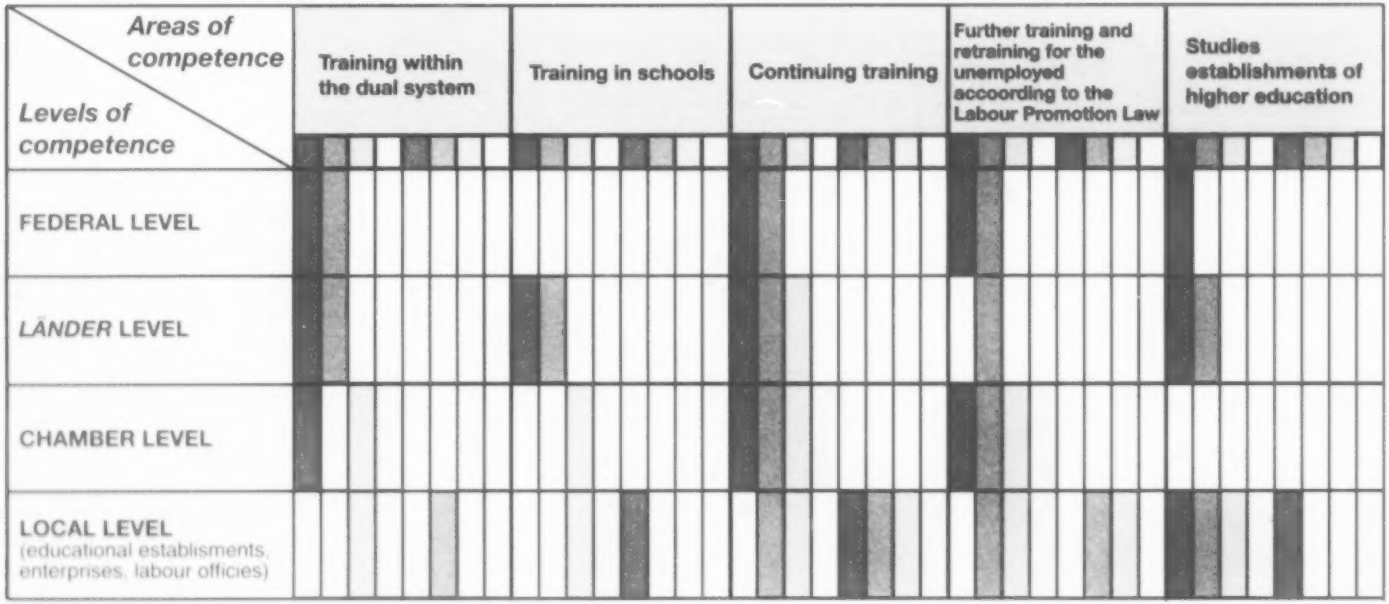
We should recall that we cannot speak in terms of a continuing vocational training 'system' in Germany. The dynamics and complexity of continuing vocational training, the main providers of which are enterprises whose continuing training activities (have to) follow their own 'laws', evidently and quite sensibly defies classification as a system. If, for this reason, it is impossible to present an organizational chart of continuing vocational training in the Federal Republic of Germany, we should nevertheless name and explain once again who is competent for what in continuing vocational training in an attempt to give it a structure of sorts.

The fact that enterprises are responsible for their own continuing vocational training largely demonstrates their autonomy in these matters. This autonomy is only restricted by the Industrial Constitution Law and the rights it provides to the works council and the youth delegation in connection with continuing training measures in enterprises.

The authority of the competent bodies covers the right to pass regulations and examination regulations for continuing vocational training. The Federal Government also has this right. Moreover, the Federal Government is responsible for the teaching qualifications of trainers, as the Trainer Aptitude Regulation of 1972 demonstrates. It is a regulation issued by the Federal Government and therefore valid throughout the Federal Republic.

According to the Basic Law, the *Länder* are not responsible for vocational training conducted in enterprises and consequently, they are not responsible for continuing vocational training provided in or arranged by enterprises. Within their sphere of competence covering vocational training schools, the *Länder* are responsible for specialized institutes, which, as we mentioned above, are important providers of continuing vocational training. The enacted educational leave laws and continuing training laws only affect enterprises in so far as they bind them or might bind them to leave regulations. They do not have any influence on the structure of in-house continuing training in terms of scope or type. In contrast to the above, the responsibility of the Federal Labour Office for the financial promotion of continuing vocational training (vocational 'further training' and 'retraining'), on the basis of the Labour Promotion Law, is quite significant. The occasional attempts to transfer greater and more comprehensive competence in continuing vocational training to adult education centres have met with disapproval, particularly on the part of employers.

Competence levels and areas of education/training — an overview (Germany)



Regulating and controlling the system (legislation, political decisions)

Determing objectives and contents (curricula, university regulations, training regulations)

Examinations and certificates

Information and counselling (educational counselling, training counselling, university counselling)

Delivery:

Offered exclusively by schools, establishments of higher education and other training institutions

Offered by enterprises and vocational schools (dual system)

Offered exclusively by enterprises

Self-studies

NB: This chart was drawn up at the express request of CEDEFOP. An attempt to throw light on the abundance of idiosysncrasies and exceprions in vocational education training through the help of such a diagram is virtually an impossible task due to the complexity of this 'system' which has grown both historically and pragmatically and consequently does not demonstrate any structure in the strict sense. Nevertheless, we can see, for example, that the objectives and contents of continuing training measures are laid down at all levels of competence, depending on the type of measure in question.

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FINANCING OF VOCATIONAL TRAINING

6.1. Financing of vocational training and continuing vocational training in enterprises

The continual increase in the importance of vocational training over the last few decades in terms of the number of participants and the number and types of measures has led to a marked rise in costs. Whereas trade and industry in the Federal Republic of Germany spent a net sum of DM 5.3 billion on in-plant vocational training and DM 2.1 billion on in-plant continuing training in 1971/72, the *Institut der Deutschen Wirtschaft* (Institute of the German Economy) reported expenditure amounting to DM 20.2 billion and DM 8 billion respectively for 1980. The same institute estimated on the basis of a survey that trade and industry spent DM 26.2 billion on continuing training alone in 1987. This figure is not undisputed, however, because of the somewhat vague and different methods of calculating the costs of continuing vocational training.

In spite of this, we can see that enterprises in the Federal Republic of Germany are investing considerable and ever growing funds in training their workers. Among the different types of costs, personnel costs dominate (trainer salaries, continued payment of wages and salaries to those attending continuing vocational training, trainee remuneration). Considerable differences exist in trainee remuneration depending on the occupation and collective agreement. While the average pay of a trainee was DM 838 in 1991, bricklayers received DM 1 322, insurance clerks DM 1 240, hairdressers DM 506 and tailors DM 260. Trainees are paid these amounts regardless of how high the income of the trainees' legal guardian might be.

When we look at the training costs of individual enterprises, we see differences in expenditure depending on the size of the enterprise, the sector and the training occupation. On average, larger enterprises spend more than smaller ones. Training which mainly takes place in a training workshop costs far more than when a trainee is primarily trained on-the-job at a work station in an enterprise.

Although most training in Germany is financed by individual enterprises, there are also collective financing regulations based on collective agreements. In these cases, all enterprises, even those that do not conduct training, pay into a common fund according to a certain basis of assessment (for example total amount of the payroll). The expenses of enterprises conducting training are then partially or completely reimbursed out of this fund. The following table gives an overview of the collective agreements with collective financing regulations.

Collective-agreement financing regulations for 1990

Collective-agreement area	Total	Training contracts	Training contracts	Employees in trade and industry	Total number of enterprises
	Million DEM	Number	Number	Number	Number
Building trade	456.3	31 614	14116	825 564	54 133
Horticulture, landscape gardening	7.5	3 521	ca. 1 300	38 128	ca. 5 400
Stonemasonry and stone sculptoring	4.1	ca. 1 250	ca. 1 000	11 500	ca. 4 200
Roofing	8.65	6 240	3 634	56 456	7 692
Total	476.55	42 625	20 050	931 648	71 425

Source: Federal Ministry of Education and Science, Berufsbildungsbericht 1991, p. 155 (Social funds of the collective-agreement parties)

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6.2. Financing of vocational training in schools

Vocational training schools, i.e. vocational schools as a partner in the dual system and specialized institutes with their upgrading training courses are financed through the tax revenues of the *Länder* and municipalities. This is also the case with full-time specialized vocational schools as centres of full-time vocational training.

6.3. Financing of vocational training at external (non-plant) training centres

Vocational training in external facilities and training centres is financed through a variety of sources. The financial resources of providers of external training workshops (for example a chamber) are augmented by funds from the Federal Labour Office, the Federal Government and the *Länder* as well as by loans from the Federal Labour Office. While this funding defrays investment costs, contributions from the training enterprises partially cover running costs. These contributions are as it were the compensation enterprises pay for sending their apprentices to an external workshop for training for a certain length of time (usually not more than 14 days per year).

6.4. Financing the promotion of vocational training through the Federal Labour Office

The wide range of activities conducted by the Federal Labour Office and based on the Labour Promotion Law are financed through the contributions which employees and employers pay in equal amounts. In 1991, the Federal Labour Office spent nearly DEM 12 billion on training and further training (excluding maintenance allowance).

6.5. Financing authorities dealing with vocational training

- The duties performed by the competent bodies in connection with apprenticeship training and continuing training are financed through members' contributions and fees charged to the training enterprises. Such fees are charged for example for counselling vocational training relationships and for conducting examinations.
- The costs incurred for the vocational training committees of the competent bodies are assumed by the respective competent bodies.
- Land committees for vocational training are financed from the budget of the respective Land ministry.
- The Federal Institute for Vocational Training is financed from Federal Government funds.

These very complex funding regulations for vocational training have developed historically. They do not follow any particular philosophy and are basically undisputed. An attempt to standardize and raise the quality of vocational training conducted in enterprises, by introducing a comprehensive collective system of financing for the enterprise side of vocational training, was a failure *(Sachverständigenkommission*, 1974).

7 DEVELOPMENTS AND PROSPECTS FOR THE FUTURE

7.1. Problems and trends in the new *Länder*

The conditions and developments in vocational training policy in the Federal Republic of Germany have taken a new turn since the two German states were unified on 3 October 1990. This has not only been a question of political integration and reorientation in the new *Länder* with a view to democratizing state structures and social spheres. It has entailed profound restructuring processes in trade and industry from a planned to a market economy and transforming nationally-owned enterprises into private ones. The various forms of interdependency between the economy and vocational training have made it necessary to reorganize vocational training as well, particularly since the structures of vocational training were defined by Marxist–Leninist ideology. With such an extraordinary historical situation, it therefore seems advisable to outline the problems and trends in vocational training in the new *Länder* separately.

To understand these problems, we first need to sketch out the situation as it existed just before unification. The common historical roots of apprenticeship training account for it having been the predominant system of vocational qualification in the new *Länder* also. However, the system took on a much different shape due to the state framework conditions (centrally administrated and controlled vocational training), economic framework conditions (vocational training in quasi state-owned enterprises) and ideological framework conditions (the aim of education and vocational training being to form a socialist person).

Thus, in stark contrast to the old *Länder*, 80% of theoretical vocational training took place in the vocational schools of nationally-owned enterprises. As a result, vocational schools which were not run by enterprises only enjoyed marginal significance. They conducted theoretical lessons primarily for apprentices from small enterprises, from the service and basic supply sectors. This resulted in a high concentration of apprentices in individual enterprises. While an average of three trainees could be found per training enterprise in the old *Länder*, 68 apprentices per training enterprise was the average in the new *Länder*.

Since many enterprises have not survived the economic restructuring process or have had to reduce their intake of apprentices to meet private enterprise conditions, the provision of sufficient training places has become a top priority in the new *Länder*.

Aspects that promote small and medium-sized enterprises play a key role in this development. The aim of such policies, which are intended to boost trade and industry and vocational training at the same time, is to increase the number of small and medium-sized enterprises in the new *Länder*. If the old *Länder* are anything to go on, healthy small and medium-sized enterprises should be able to provide a large number of training places. These efforts go hand in hand with promotion measures of the Federal Government to fund the setting-up and extension of external training centres which, in this special situation, serve as more than just a facility to supplement on-the-job vocational training.

The restructuring process from a planned to a market economy and from nationally-owned to privately-owned enterprises is in full stride but a long way from over when measured against what full functioning capacity would be. In the course of the economic restructuring process and the privatization of enterprises and vocational training, the vocational training system in the new *Länder* has lost its specific social state foundations. Changes were imperative. A (not fully uncontroversial) decision was taken in favour of adopting the dual system as practised in the old *Länder*. Back in August 1990, in other words, before unification, the People's Chamber of the former German Democratic

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Republic had enacted the Vocational Training Act and the Crafts Code of the Federal Republic of Germany. One month prior to that, a law on vocational schools had been passed, according to which maintenance of vocational schools was in general to be transferred to the municipalities.

When the Vocational Training Act came into force in the five new *Länder*, it triggered a structural adaptation process which was, as it were, inevitable. This upheaval was at-tended by massive problems due to the following reasons:

- many of the enterprises have had to close down or they are in a state of 'transition' or they are not, or not yet, competitive;
- these enterprises have closed down most of their in-house vocational schools and vocational academies. As a result, training capacity has declined drastically;
- in the old *Länder*, around 50% of trainees are trained in the industrial and commercial sectors, compared to 80% in the new *Länder* (late summer of 1990).
- the situation in the craft trade sector is just the reverse. 35% of trainees in the old *Länder* and only 9% in the new *Länder* were concentrated in this field of training;
- an increase in training capacity in the craft trades requires the founding of new craft trade enterprises. The livelihood and development of this sector had to fight an uphill battle in the new *Länder*;
- enterprises and vocational schools are poorly equipped for vocational training. In more than one-third of the training facilities in the former German Democratic Republic, the machines are more than 15 years old, and 20% of the school buildings have serious structural deficiencies or are completely unusable (see Autsch et al., May 1991, p. 14).

Another important task in the coming years will be the training and continuing training of the trainers in enterprises and the teachers in vocational schools to upgrade their qualifications to meet the new conditions and demands. Some of the tasks awaiting attention are the further development and consolidation of the completely new infrastructure for vocational training such as the chambers, labour offices, etc. Similar restructuring problems have to be solved in the field of continuing vocational training as it, too, was organized and structured in quite a different way. Continuing vocational training is particularly affected in enterprises that now have to operate as private enterprises on the open market. In the wake of the complete restructuring of the economy, the need for retraining is enormous, which means that the coming years will be marked by an unusually high measure of continuing training activities in the new *Länder*.

In view of the conditions that we have described only briefly here, the experts agree that the vocational training system in the new *Länder* will be characterized by transi-tional solutions for a long time. Despite formal and legal parity, practical structural differences between the old and the new *Länder* will be the order of the day for a long time to come.

7.2 Problems and developments in vocational training

The dual system of vocational training has undergone notable developments over the last 25 years in terms of numbers and in the quality of the training it provides. For many years the number of apprentices remained relatively constant, then in the mid-1970s the number of trainees rocketed to reach its historical zenith in 1985 with 1 831 501 apprentices. This growth was the result of the baby-boom years coupled with overall successful efforts of trade and industry to offer virtually all young people a training place. Since then, the number of apprentices has declined again; in 1990, 1 476 900 young people were undergoing training in the dual system.

The decline can be attributed to the 'normalization' in the number of school-leavers as well as to the increase in the number of young people leaving school with university entrance qualifications. In the meantime, more than 30% of any one age-group of young people are entitled to attend an establishment of higher education. In spite of the fact that 15.8% of those with university entrance qualifications opted to train within the dual system in 1989, this development, i.e. the growing competition from higher education, poses a problem. The situation is aggravated further by the growing trend among young people to prefer white-collar work. Certain commercial and technical occupations in industry, the majority of craft trade occupations as well as occupations in the catering and retail sectors are most affected by these trends.

As mentioned above, for the first time ever in the history of German education, the number of students now exceeds the number of apprentices. Nevertheless, the number of young people enroling in the dual system is still nearly double the number of young people enroling in higher education. In 1990, 545 200 young persons started training within the framework of the dual system and 278 200 began studying at an establishment of higher education. The average time (actual period of study) a student studies at an institution of higher education is twice as long as an apprentice spends at training within the dual system. From the numbers aspect (and for other reasons as well), the future of the dual system does not seem to be in danger, contrary to the opinion of a few observers and experts on the German education system.

However, we do need some extra efforts to maintain the attractiveness of the dual system and to enhance it wherever possible. We must bear in mind that the pre-vocational training year as an important starting point for reform did not catch on as expected. The number of pupils taking the pre-vocational training year at school has steadily declined since 1986. 'Fewer and fewer pupils rely upon the pre-vocational training year as a temporary substitute for a training position, while it is an obligatory part of on-the-job vocational training for an ever growing number of trainees' (*Berufsbildungsbericht 1991*). Whereas the pre-vocational training year at school suffered a decline from 86 082 pupils in 1983 to 36 641 in 1990, the number of trainees doing a cooperative pre-vocational training year climbed to 47 035. Attempts to introduce stage-based training reforms have been abandoned in all but a few instances (for example stage-based training in the building industry). Nevertheless, the basic educational and didactic idea behind stage-based training has not been lost. We still have the concept of increasing specialization stage-by-stage founded on basic qualifications applicable to a wide range of occupations. The didactic structure of the new regulations is essentially designed on this principle. Bearing in mind the trends illustrated by the fluctuations in numbers of trainees described above, we can see what needs to be done and can be done to improve the quality of the dual system in the future.

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The Federal Government views the following as focal points for a further development of the dual system:

- opportunities aimed at promoting achievement and the talent of gifted young people must be further developed and vastly extended in vocational training;
- measures to promote the vocational training of disadvantaged young people must be continued and further developed;
- new initiatives must be implemented to improve training opportunities for young people who, despite intensive support and in some cases longer training periods, fail to meet the requirements of the currently recognized training occupations;
- training opportunities for girls and women must be extended and improved, particularly in technically oriented occupations;
- training occupations must be updated continually and rapidly;
- additional efforts must be undertaken to upgrade the educational and didactic qualifications and continuing training of trainers;
- the constant modernization of external vocational training centres must be ensured;
- the situation of vocational schools in the dual system must be improved: there must be a sufficient supply of teachers, their qualifications and continuing training must be ensured, and modern technical equipment must be available;
- the vocational and social opportunities of skilled workers trained in the dual system must be further improved by extending vocational continuing training; more flexible offers of vocational continuing training which are keeping with their career development and which improve the reconcilability of family and work must be developed for women;
- the quality of environmental education and training must be further developed; it must become an integral component of vocational training both with regard to the specific occupation and in terms of environmental protection in general;
- efforts must be made to strengthen European cooperation on vocational training policy and the orientation of vocational training toward the new and widening demands resulting from Europe becoming more closely knit. (*Antwort der Bundesregierung auf eine kleine Anfrage; Deutscher Bundestag, Drucksache* 11/6353, 5 February 1990).

We must add that the attractiveness of the dual system should and can be enhanced by entitling skilled workers who have completed their training in the dual system to study at an establishment of higher education under certain circumstances, in addition to their current eligibility to further their career through continuing vocational training. In other words, dual training should in principle open up the same options as other available paths of education. Establishing equivalence between dual training and an educational course leading to university entrance qualifications in stage II secondary education remains an important goal of education policy when we consider the future prospects of the dual system. At the same time, vacant training places in certain enterprises and occupations (for example in craft trades) are opening up greater opportunities for groups of young people who have been at a disadvantage so far, in particular young for-eigners, to acquire vocational qualifications within the dual system. Such enterprises are having to rely more and more on these young people to ensure they have a new generation of skilled workers. However, enterprises and vocational schools need to make additional efforts and invest more to develop differentiated training methods and ensure more intensive supervision.

7.3 Problems and developments in vocational continuing training

The experts all agree that vocational continuing training is the most rapidly expanding area of vocational training. The shift in emphasis from initial vocational training to continuing training is unmistakable. Yet, a sound general education and broad vocational qualifications remain the indispensable foundations to provide the contents and motivation for continuing training to build on. This in itself prohibits a segmentation of vocational training policy into sub-sections since these need to be integrated and inter-related more and more. In general, complaints are voiced about the difference between the various groups of employees when it comes to participating in continuing training. Skilled workers, semi-skilled and unskilled workers attend continuing training much less frequently than middle management and executives. This problem has to be recognized by researchers as well as continuing training policy makers. Regional, external and in-house information and advisory systems that are more concerned with motivation than selection represent a step in the right direction. These systems are necessary because, as we have demonstrated, continuing vocational training is characterized by an unusual variety of objectives, contents, providers, organizational forms, modes of financing, etc.

This situation, which is typical of Germany, can be identified as the market structure of continuing training. Opinions voiced and endeavours made every now and then to weaken this market structure through a stricter regulating system in the sense of a comprehensive continuing training law analogous to the Vocational Training Act, would in all probability, not meet with a positive response from the majority of politicians responsible for vocational training.

However, that does not exclude the possibility of protective regulations, similar to the ones for distance learning, in some areas for users of continuing vocational training. Not unlike the case with distance learning institutes, which have been subject to quality controls for some time, there are the odd 'black sheep' amongst the private providers of classroom-approach continuing vocational training. In-house updating training in particular eludes legal regulation since it has to react flexibly and quickly to the various needs of an enterprise and its workers. In this connection, however, there is some discussion as to whether it would not be of benefit to enterprises as well if their updating training were more broadly defined in terms of content and time frame than is usually the case.

There is nothing standing in the way of the apparent, albeit slow, trend toward conducting continuing vocational training not only in seminar form but also at the workplace or closely related to it. The tie between work and learning is one aspect of continuing training which is being paid more and more attention. Not only do changes in work organization, partly under the influence of new technologies, play an essential role here, but also more recent developments in corporate culture – the business enterprise as a 'learning system'. Moreover, there is widespread agreement on the significance of continuing vocational training for an individual's social and career opportunities, for the national and international competitiveness of enterprises and for the economy as a whole.

7.4 International dimensions in vocational training

The completion of the Single European Market at the end of 1992 means that a single economic community without internal frontiers will exist in the 12 Member States of the EC. Because vocational training is so important for the economy of a country and of an economic community, this Single European Market presents a challenge to the vocational training system of the Federal Republic of Germany. This (dual) system of vocational training has proven its worth, also when compared to the systems in other EC countries. Quite a few foreign observers, experts and vocational training policy makers see in it aspects which can help to improve their own systems. This situation is not without its problems since it could tempt politicians responsible for vocational training to assume the role of a 'schoolmaster'. In practice, however, the Federal Government, the *Länder*, the Federal Institute for Vocational Training in Berlin, professional associations and the trade unions all exercise restraint on this issue. But this does not exclude diverse cooperation at all levels and a sense of 'learning from one another'.

The principle that the implementation of a common vocational training policy should not and cannot be achieved by harmonizing or standardizing national vocational training courses and systems also applies to the Federal Republic of Germany. With the economy becoming internationalized and international cooperation between businesses strengthening, more and more personnel are requiring additional qualifications.

Knowledge about the economic systems of foreign countries, foreign languages and the ability to learn interculturally all contribute to the greater regional mobility of workers. Considering the EC countries conclude 60% of their export trade among themselves, it is obvious why we need to learn the languages of our neighbours more than ever before. Although Germans on the average have a better knowledge of foreign languages than, for example, the French, Spaniards, British or Italians, this does not alter the fact that 60% of all Germans do not speak any foreign language whatsoever. 'Linguistic internationalization' of vocational training within the framework of vocational qualification processes has been recognized as a necessity, and corresponding didactic approaches and concepts are being developed and put into action more frequently. Learning foreign languages as a requirement for international information and communication beyond one's national borders during working hours and in one's free time, is an essential prerequisite for intercultural learning but it does not fill this dimension completely, however. All educational processes, including training and continuing training, must extend beyond the functional aspects of qualification and lead to a better understanding of other cultures, values, ways of life and modes of behaviour. We have to take a closer look at this assignment than ever before, and the Federal Republic of Germany needs to devote itself to this task just as the other countries in the EC.

Due to its geographic location, and as a result of unification and the collapse of the Comecon countries (the former Soviet Union, Poland, Hungary, etc.), the Federal Republic of Germany now has a special role to play in terms of its international vocational training policy. In the countries once under the sphere of influence of the former USSR, not only are social and state structures undergoing a complete change in the sense of a democratization process; their economies are being restructured from planned to market economies at the same time. This in turn will have an effect on the structure, objectives and contents of vocational training. Together with its Western European neighbours, the Federal Republic of Germany is called upon to provide support. It has therefore become involved in the initial and continuing training of skilled workers

and management personnel through bilateral governmental agreements on cooperation.

The 'new line of vision' of the international vocational training policy in the Federal Republic of Germany is also finding expression in the widened spectrum of tasks of the Federal Institute for Vocational Training in Berlin. There are now cooperation agreements between the Federal Institute for Vocational Training and vocational training institutions in Eastern European countries. In addition, the Federal Institute for Vocational Training has been given the task of planning, preparing, implementing and evaluating the Federal Ministry for Education and Science's support programme of 'Vocational Training in Eastern Europe'.

The annual Forum of Vocational Training Institutes of the EC, organized by CEDEFOP, in which Eastern European countries also participate, helps to intensify the exchange of information and experience as well. The German institutions and persons responsible for vocational training policy are aware that help and cooperation in reforming vocational training in Eastern Europe requires the utmost sensitivity, expert analysis and differentiated counselling.

The fact that the Federal Republic's involvement in vocational training in the European Community and in the countries of Eastern Europe in no way affects its extensive work in development cooperation with Third World countries need only be mentioned for the sake of completeness. The wide range of international cooperation and learning processes can be further illustrated by the fact that the United States, in the throes of its current vocational training crisis, is taking a closer look at the German dual system, and in light of the thriving economic accomplishments of the Japanese, quite a few German vocational training experts are asking to what extent and in what way the Japanese system of vocational training has contributed to their success.

ANNEXES

Annex 1

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Annex 2

Bilingual lists of selected institutions, legislation and key terms

A. Institutions
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A. Institutions
German → English

Arbeitskreis der Berufsberatung	Vocational Counselling Working Group
Arbeitsstelle für betriebliche Berufsausbildung	Office for on-the-job Vocational Training
Ausschuß für Fragen Behinderter	Committee for Issues of the Handicapped
Berufsbildungsausschuß	Vocational training committee
Berufsfortbildungswerk	Further vocational training association
Bildungskommission des Deutschen Bildungsrates	Education Commission of the German Council for Education
Bildungswerk der Wirtschaft	Commerce and Industry Training Association
Bundesanstalt für Arbeit (BA)	Federal Labour Office
Bundesinstitut für Berufsbildung (BIBB) **– Der Hauptausschuß** **– Der Generalsekretär**	Federal Institute for Vocational Training – The Board – The Secretary-General
Bundesinstitut für Berufsbildungsforschung (BBF)	Federal Institute for Vocational Training Research
Bundesministerium für Bildung und Wissenschaft (BMBW)	Federal Ministry of Education and Science
Bundesministerium für innerdeutsche Beziehungen	Federal Ministry for Intra-German Relations

Bundesrat	Federal Council
Bundestag	Federal Diet
Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung	Education Planning and Research Promotion Commission of the Federal Government and the *Länder*
Europäisches Zentrum für die Förderung der Berufsbildung (CEDEFOP)	European Centre for the Development of Vocational Training (CEDEFOP)
Deutscher Ausschuß für technisches Schulwesen (DATSCH)	German Committee for Technical Education
Deutscher Bildungsrat	German Council for Education
Deutscher Fernschulverband e.V.	German Association of Distance Learning Institutes
Deutscher Industrie- und Handelstag	Association of German Chambers of Industry and Commerce
Deutscher Volkshochschulverband	German Adult Education Association
Fachausschüsse	Specialized committees
Handwerkskammer	Chamber of Handicrafts
Industrie- und Handelskammer	Chamber of Industry and Commerce
Institut der Deutschen Wirtschaft (IW)	Institute of the German Economy
Institut für Arbeitsmarkt- und Berufsforschung	Institute for Employment Research
Landtag	*Land* parliament
Landesausschüsse für Berufsbildung	*Land* committees for vocational training
Prüfungszentrale des Deutschen Fernschulverbandes e.V.	Education Headquarters of the German Association of Distance Learning Institutes
Reichsinstitut für Berufsbildung in Handel und Gewerbe	Reich Institute for Vocational Training in Commerce and Industry
Staatliche Zentralstelle für Fernunterricht	State Headquarters for Distance Learning
Ständige Konferenz der Kultusminister der Länder	Standing Conference of *Land* Ministers of Education and Cultural Affairs

A. Institutions
English → German

Association of German Chambers of Industry and Commerce	Deutscher Industrie- und Handelstag
Chamber of Handicrafts	Handwerkskammer
Chamber of Industry and Commerce	Industrie- und Handelskammer
Commerce and Industry Training Association	Bildungswerk der Wirtschaft
Committee for Issues of the Handicapped	Ausschuß für Fragen Behinderter
Education Commission of the German Council for Education	Bildungskommission des Deutschen Bildungsrates
Education Headquarters of the German Association of Distance Learning Institutes	Prüfungszentrale des Deutschen Fernschulverbandes e.V.
Education Planning and Research Promotion Commission of the Federal Government and the *Länder*	Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung
European Centre for the Development of Vocational Training (CEDEFOP)	Europäisches Zentrum für die Förderung der Berufsbildung (CEDEFOP)
Federal Council	Bundesrat
Federal Diet	Bundestag
Federal Institute for Vocational Training **- The Board** **- The Secretary-General**	Bundesinstitut für Berufsbildung (BIBB) – Der Hauptausschuß – Der Generalsekretär
Federal Institute for Vocational Training Research	Bundesinstitut für Berufsbildungsforschung (BBF)
Federal Labour Office	Bundesanstalt für Arbeit
Federal Ministry of Education and Science	Bundesministerium für Bildung und Wissenschaft (BMBW)
Federal Ministry for Intra-German Relations	Bundesministerium für innerdeutsche Beziehungen
Further vocational training association	Berufsfortbildungswerk

German Adult Education Association	Deutscher Volkshochschulverband
German Association of Distance Learning Institutes	Deutscher Fernschulverband e.V.
German Committee for Technical Education	Deutscher Ausschuß für technisches Schulwesen (DATSCH)
German Council for Education	Deutscher Bildungsrat
Institute for Employment Research	Institut für Arbeitsmarkt und Berufsforschung
Institute of the German Economy	Institut der Deutschen Wirtschaft (IW)
***Land* committees for vocational training**	Landesausschüsse für Berufsbildung
***Land* parliament**	Landtag
Office for on-the-job Vocational Training	Arbeitsstelle für betriebliche Berufsausbildung
Reich Institute for Vocational Training in Commerce and Industry	Reichsinstitut für Berufsbildung in Handel und Gewerbe
Specialized committees	Fachausschüsse
Standing Conference of *Land* Ministers of Education and Cultural Affairs	Ständige Konferenz der Kultusminister der Länder
State Headquarters for Distance Learning	Staatliche Zentralstelle für Fernunterricht
Vocational Counselling Working Group	Arbeitskreis der Berufsberatung
Vocational training committee	Berufsbildungsausschuß

B. Legislation
German → English

Allgemeine Preußische Gewerbeordnung	Prussian Trade and Industry Code
Arbeitsförderungsgesetz (AFG)	Labour Promotion Law
Ausbildereignungsverordnung	Trainer Aptitude Regulation
Ausbildungsplatzförderungs-gesetz	Training Place Promotion Law
Berufsbildungsgesetz (BBiG)	Vocational Training Act
Betriebsverfassungsgesetz	Industrial Constitution Law
Bundesausbildungsförderungs-gesetz	Federal Law on Education and Training Promotion
Fernunterrichtsschutz-gesetz	Distance Learning Protection Law
Gewerbeordnung des Norddeutschen Bundes	Trade and Industry Code of the North German Federation
Grundgesetz	Basic Law
Handwerksordnung (HWO)	Crafts Code
Hochschulrahmengesetz	Higher Education Framework Law
Jugendarbeitsschutzgesetz	Youth Employment Protection Law
Ordnung der Drechsler zu Köln	Ordinance of the Cologne Wood Turners
Personalvertretungsgesetze	Personnel Representation Laws
Regelung des Lehrlingswesens	Regulation on apprentice training
Reichsschulpflichtgesetz	Reich Compulsory Education Act

B. Legislation
English → German

Basic Law	Grundgesetz
Crafts Code	Handwerksordnung (HWO)
Distance Learning Protection Law	Fernunterrichtsschutz-gesetz
Federal Law on Education and Training Promotion	Bundesausbildungsförderungs-gesetz
Higher Education Framework Law	Hochschulrahmengesetz
Industrial Constitution Law	Betriebsverfassungsgesetz
Labour Promotion Law	Arbeitsförderungsgesetz
Ordinance of the Cologne Wood Turners	Ordnung der Drechsler zu Köln
Personnel Representation Laws	Personalvertretungsgesetze
Prussian Trade and Industry Code	Allgemeine Preußische Gewerbeordnung
Regulation on apprentice training	Regelung des Lehrlingswesens
Reich Compulsory Education Act	Reichsschulpflichtgesetz
Trade and Industry Code of the North German Federation	Gewerbeordnung des Norddeutschen Bundes
Trainer Aptitude Regulation	Ausbildereignungsverordnung
Training Place Promotion Law	Ausbildungsplatzförderungsgesetz
Vocational Training Act	Berufsbildungsgesetz (BBiG)
Youth Employment Protection Law	Jugendarbeitsschutzgesetz

CEDEFOP

C. Key terms
German → English

Allgemeine Fachhochschule	General higher education institution
Arbeitsstelle für betriebliche Berufsausbildung	Office for on-the-job Vocational Training
Berichtssystem Weiterbildung	Continuing training report system
Berufliches Gymnasium	Vocational grammar school
Berufsakademie	Vocational academy
Berufsaufbauschule	Vocational extension school
Berufsbildende Schule	Vocational training school
Berufsbildungsbericht	Report on Vocational Education
Berufsfachschule	Full-time specialized vocational school
Berufsgrundbildungsjahr-Anrechnungsverordnungen	Credit of pre-vocational year regulation
Berufsschule	Vocational school
Bezeichnungen zur Gliederung des beruflichen Schulwesens	Designations for Structuring Vocational Schools
Beschluß der Kultusministerkonferenz vom 8. Dezember 1975	Decision of the Standing Conference of the Ministers of Education and Cultural Affairs dated 8 December 1975
Fachhochschule	Specialized institution of higher education
Fachhochschulreife	Certificate of aptitude for specialized short-course higher education
Fachoberschule	Higher technical school
Fachschule	Specialized institute
Fernuniversität	Open university
Gesamthochschule	Comprehensive university
Gesamtschule	Comprehensive school
Grundschule	Primary school
Gymnasium	Grammar school

Gymnasium in Aufbauform	Upper level grammar school
Hauptschule	Lower secondary school
Hochschule	Institution of higher education
Hochschulreife	University entrance certificate
Höhere Fachschule	Higher technical school
Individuelle Förderung	Individual support
Institutionelle Förderung	Institutional support
Kammer	Chamber
Kollegschule	College school
Kollegstufe	College stage
Kunsthochschule	Art College
Lehre	Apprenticeship
Lehrling	Apprentice
Leistungsfächer	Major subjects
Mainzer Studienstufe	Mainz study level
Pädagogische Hochschule	Teacher training institution
Qualifizierungstarifverträge	Collective agreements on qualification
Realschule	Intermediate secondary school
Referendariat	Preparatory teaching period
Regelschule	'Regular' school
Reichserziehungsminister	Reich Minister for Education
Schulaufsichtsbehörde	School supervisory board
Statistisches Jahrbuch der BRD	Yearbook of statistics on the FRG
Technikerschule	Technical college
Technische Akademie	Technical academy
Theologische Hochschule	Theological institution
Vereinbarung über den Abschluß der Berufsschule	Agreement on completion of vocational schooling

CEDEFOP

Verfahren für die Abstimmung von Ausbildungsordnungen und Rahmenlehrplänen nach dem Gemeinsamen Ergebnisprotokoll vom 30. Mai 1972	Procedure for the harmonization of training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972
Verwaltungsfachhochschule	Institute of administrative studies
Volkshochschule	Adult education centre
Volksschule	Previously the name given to schools comprising primary and lower secondary classes
Vordiplomzeugnis	Pre-diploma
Vorklasse	Preliminary school year prior to the first class
Zuständige Stellen	Competent bodies

C. Key terms
English → German

Adult education centre	Volkshochschule
Agreement on completion of vocational schooling	Vereinbarung über den Abschluß der Berufsschule
Apprentice	Lehrling
Apprenticeship	Lehre
Art college	Kunsthochschule
Certificate of aptitude for specialized short-course higher education	Fachhochschulreife
Chamber	Kammer
Collective agreements on qualification	Qualifizierungstarifverträge
College school	Kollegschule
College stage	Kollegstufe
Competent bodies	Zuständige Stellen
Comprehensive school	Gesamtschule
Comprehensive university	Gesamthochschule

Continuing training report system	Berichtssystem Weiterbildung
Credit of pre-vocational year regulation	Berufsgrundbildungsjahr-Anrechnungsverordnungen
Decision of the Standing Conference of the Ministers of Education and Cultural Affairs dated 8 December 1975	Beschluß der Kultusminister-konferenz vom 8. Dezember 1975
Designations for Structuring Vocational Schools	Bezeichnungen zur Gliederung des beruflichen Schulwesens
Full-time specialized vocational school	Berufsfachschule
General higher education institution	Allgemeine Fachhochschule
Grammar school	Gymnasium
Higher technical school	Höhere Fachschule
Higher technical school	Fachoberschule
Individual support	Individuelle Förderung
Institute of administrative studies	Verwaltungsfachhochschule
Institution of higher education	Hochschule
Institutional support	Institutionelle Förderung
Intermediate secondary school	Realschule
Lower secondary school	Hauptschule
Mainz study level	Mainzer Studienstufe
Major subjects	Leistungsfächer
Office for on-the-job Vocational Training	Arbeitsstelle für betriebliche Berufsausbildung
Open university	Fernuniversität
Pre-diploma	Vordiplomzeugnis
Preliminary school year prior to the first class	Vorklasse
Preparatory teaching period	Referendariat
Previously the name given to schools comprising primary and lower secondary classes	Volksschule

CEDEFOP

Primary school	Grundschule
Procedure for the harmonization of training regulations and skeleton curricula in accordance with the joint report on findings of 30 May 1972	Verfahren für die Abstimmung von Ausbildungsordnungen und Rahmenlehrplänen nach dem Gemeinsamen Ergebnisprotokoll vom 30. Mai 1972
'Regular' school	Regelschule
Reich Minister for Education	Reichserziehungsminister
Report on Vocational Education	Berufsbildungsbericht
School supervisory board	Schulaufsichtsbehörde
Specialized institution of higher education	Fachhochschule
Specialized institute	Fachschule
Teacher training institution	Pädagogische Hochschule
Technical academy	Technische Akademie
Technical college	Technikerschule
Theological institution	Theologische Hochschule
University entrance certificate	Hochschulreife
Upper level grammar school	Gymnasium in Aufbauform
Vocational training school	Berufsbildende Schule
Vocational extension school	Berufsaufbauschule
Vocational academy	Berufsakademie
Vocational grammar school	Berufliches Gymnasium
Vocational school	Berufsschule
Yearbook of statistics on the FRG	Statistisches Jahrbuch der BRD

Annex 3

List of important addresses

Bundesanstalt für Arbeit (BA)
Regensburger Str. 104
D-90478 Nürnberg
Tel.: 49 911 179 0
Fax: 49 911 179 21 23

Bundesinstitut für Berufsbildung (BIBB)
Fehrbelliner Platz 3
D-10707 Berlin
Tel.: 49 30 86 830
Fax: 49 30 86 432 455

Bundesministerium für Arbeit und Sozialordnung (BMA)
Rochusstr. 1
D-53123 Bonn
Tel.: 49 228 527 1
Fax: 49 228 527 29 65

Bundesministerium für Bildung und Wissenschaft (BMBW)
Heinemannstr. 2
D-53175 Bonn
Tel.: 49 228 57 0
Fax: 49 228 57 20 96

Bundesministerium für Wirtschaft (BMWI)
Villemombler Str. 76
D-53123 Bonn
Tel.: 49 228 615 0
Fax: 49 228 615 44 37

Bundesverband der Deutschen Industrie (BDI)
Simrockstr. 21
D-53113 Bonn
Tel.: 49 228 21 00 61
Fax: 49 228 21 36 24

Bundesverband der Lehrer an beruflichen Schulen (BLBS)
An der Esche 2
D-53111 Bonn
Tel.: 49 228 37 19 59
Fax: 49 228 37 90 05

Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA)
Postfach 510508
D-50941 Köln
Tel.: 49 221 379 50
Fax: 49 221 379 52 35

Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung (BLK)
Friedrich-Ebert-Allee 39
D-53113 Bonn
Tel.: 49 228 540 20
Fax: 49 228 540 21 50

Carl Duisberg Gesellschaft (CDG)
Hohenstaufenring 30-32
D-50674 Köln
Tel.: 49 221 209 80
Fax: 49 221 209 81 11

Deutsche Angestellten Gewerkschaft (DAG)
Adenauerallee 118
D-53113 Bonn
Tel.: 49 228 21 00 87
Fax: 49 228 26 15 75

Deutsche Forschungsgemeinschaft (DFG)
Kennedyallee 40
D-53175 Bonn
Tel.: 49 228 885 0
Fax: 49 228 885 22 21

Deutsche Gesellschaft für Erziehungswissenschaft e.V. (DGfE)
c/o Freie Universität Berlin
Institut für Allgemeine und Vergleichende Wissenschaft
Arnimallee 10
D-14195 Berlin
Tel.: 49 30 838 52 95
Fax: 49 30 838 58 89

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
Postfach 5180
D-65726 Eschborn
Tel.: 49 6196 790
Fax: 49 6196 791 115

Deutscher Gewerkschaftsbund (DGB)
Hans-Böckler-Str. 39
D-40476 Düsseldorf
Tel.: 49 211 430 10
Fax: 49 211 430 14 71

Deutscher Handwerkskammertag (DHKT)
Johanniterstr. 1
D-53113 Bonn
Tel.: 49 228 545 0
Fax: 49 228 545 205

Deutscher Industrie- und Handelstag (DIHT)
Adenauerallee 148
D-53113 Bonn
Tel.: 49 228 104 0
Fax: 49 228 104 158

Deutsches Handwerksinstitut (DHI)
Max-Joseph-Str. 4 / V
D-80333 München
Tel.: 49 89 593 671
Fax: 49 89 553 453

Gewerkschaft Erziehung und Wissenschaft (GEW)
Reifenbergerstr. 21
D-60489 Frankfurt am Main
Tel.: 49 69 789 730
Fax: 49 69 789 732 01

Institut für Arbeitsmarkt- und Berufsforschung (IAB)
Platenstr. 46
D-90441 Nürnberg
Tel.: 49 911 179 0
Fax: 49 911 179 32 58

Institut der Deutschen Wirtschaft (IW)
Gustav-Heinemann-Ufer 84-86
D-50968 Köln
Tel.: 49 221 370 41

Kuratorium der Deutschen Wirtschaft für Berufsbildung (KWB)
Buschstr. 83
D-53113 Bonn
Tel.: 49 228 915 23 0
Fax: 49 228 915 23 99

Ständige Konferenz der Kultusminister der Länder (KMK)
Nassestr. 8
D-53113 Bonn
Tel.: 49 228 5011

Statistisches Bundesamt (StBA)
Gustav-Stresemann-Ring 11
D-65189 Wiesbaden
Tel.: 49 611 751 1
Fax: 49 611 724 000

Zentralverband des Deutschen Handwerks (ZDH)
Johanniterstr. 1
D-53113 Bonn
Tel.: 49 228 545 0
Fax: 49 228 545 205

Annex 4

Index of key terms

The numbers in bold type indicate the paragraphs dealing with the key term. The other numbers indicate paragraphs in which the key term appears but is not the main topic.

Apprenticeship system **2.1./2.2./2.5.**

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Collective agreement regulations **4.5.4.**/1.4.1./6.1.

Continuing training
- Basic data **4.1.**
- Basic structures **4.1.**
- Collective agreement regulations **4.5.4.**
- Competences **5.3.**
- Financing **6.1.**
- Forms **4.1.1.**
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- Meaning of the term **4.1.1.**
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- Promotion **4.5.2.**
- Providers and institutions **4.3./4.3.3.**
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- The state and the market **4.1.3.**

Continuing training laws **4.5.3.**/4.2./6.1.

Continuing vocational training **4/5.3./7.4.**/7.1.

Didactic foundations **3.2.6.**
- Enterprises **3.2.6.1.**
- Vocational schools **3.2.6.2.**

Distance learning **4.3.4./**7.3.

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Dual system
- An 'open' field of training **3.2.4.1.**
- Basic structure **3.2.1.**
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- Didactic foundations **3.2.6.**
- Educational aspects **3.2.3.**
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• Legal aspects	**3.2.2.**
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• Teaching personnel	**3.2.5.**
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Enterprises	
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Federal Republic of Germany	
• Economy	**1.3.**
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Bristol, 1984, 78 p.
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Luxembourg, 1991, 294 p.
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Vocational education and training in the Federal Republic of Germany

Joachim Münch
University of Kaiserslautern
1992

Luxembourg: Office for Official Publications of the European Communities.

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